NATION SHALL SPEAK PEACE UNTO NATION

WORLD-RADIO

DOMINION & FOREIGN PROGRAMMES

The Official Foreign & Technical Journal of the B.B.C.

Vol. XIV No. 348 Registered at the G.P.O. as a Newspaper. FRIDAY, MARCH 25, 1932 Three Pence

SPECIAL ARTICLES AND PICTURES RELATING TO THE GOETHE AND HAYDN CENTENARY CELEBRATIONS

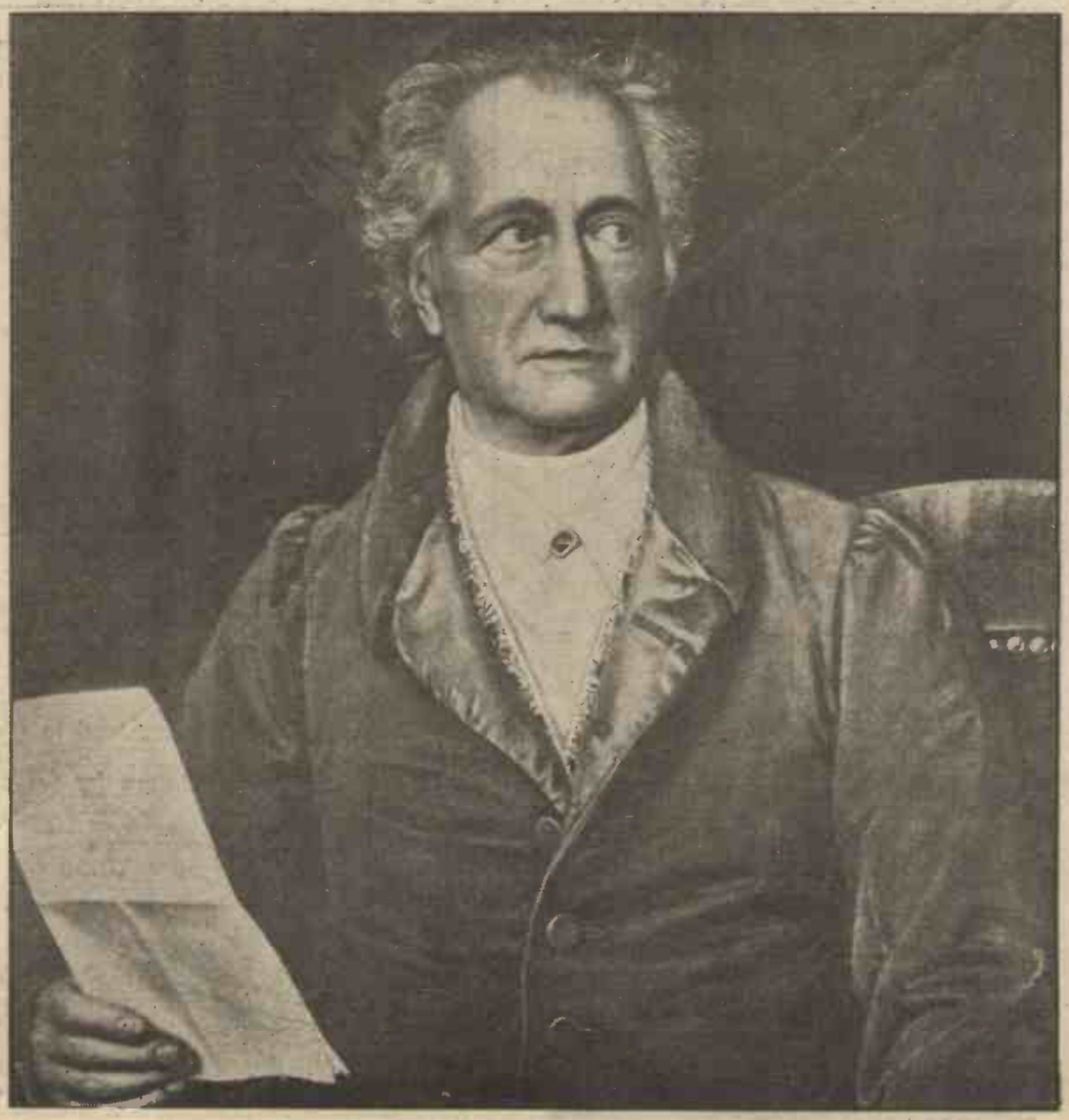
"HILVERSUM and HUIZEN"

THE BOAT-RACE RELAY

ELEMENTS OF WIRELESS

COMPETITION RESULTS

DISTANT LISTENING—TO-DAY AND YESTERDAY



[By Courtesy of the German Railways' Information Bureau

Goethe, at the age of 80: from the portrait by Karl Stieler

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Music and Letters: Two Centenaries

SELDOM indeed can it happen that a space of ten days contains two such notable centenaries as that which fell on March 22 and that which will occur on March 31. Nineteen thirty-two is Goethe Year; it is also Haydn Year, and both masters are receiving a full meed of recognition, in which broadcasting is playing an honourable part. During the last three or four months German programmes—particularly those of Königs Wusterhausen—have been preparing for the supreme celebration, on Tuesday last, of the centenary of Goethe's death by lectures on this great German—in many ways the greatest representative of Germany. The principal celebrations will, of course, take place in Weimar, the town with which the poet was so intimately connected. Here, on March 23 and 24, men of letters from various countries will broadcast—each in his national language—tributes to Goethe's greatness.

The Haydn celebrations, of course, consist mostly in performances of his music. In the hope of leaving a permanent memorial of his centenary, the people of the Burgenland would like to make Eisenstadt, the capital of the province, into the Haydn town, just as Salzburg has become the town of Mozart.

With that object in view, the authorities are planning the purchase of the house in Eisenstadt in which Haydn lived for thirty years; they propose to turn it into a Haydn museum. The summer house in which he is supposed to have composed his famous national anthem is also to be acquired.

In front of the new government building a Haydn Memorial Hall is to be built in which concerts and plays will be given.

It is estimated that those plans will require funds to the amount of £30,000, and every effort is being made to raise the greater part of the money in Austria and in Germany. The realisation of the entire scheme could, however, not be brought about unless contributions were to be obtained from other countries as well. It is hoped that in view of the great popularity which Haydn enjoys in England, and the many ties which link him to this country, it may be possible to have money subscribed here. A Haydn Committee has been formed in London, and is working with that in view. A sum of £4,000 would enable Haydn's old home to be purchased and saved from demolition, make possible the formation of the nucleus of the Haydn museum, and help towards the erection of the proposed monument.

Viâ Ether

Goethe's Parents.

THE parents of great men seldom achieve fame and less often find it thrust upon them. Especially is this the case with the fathers; the mothers receive perhaps a rather better "press." Two mothers of famous men, however, leap to mind immediately by reason of their won outstanding qualities: Laetitia Bonaparte and Elisabeth Goethe. Just as Napoleon and Goethe were great in their several ways, so were their mothers, if we may judge them from what has been recorded of them. The former—wife of a Corsican lawyer—who survived her son's defeat and death for many years, appears to have been somewhat gloomy of temperament and hard of nature. The latter—a native of Frankfurt—seems, on the other hand, to have been blessed with a sunny disposition. Goethe's famous lines express this so well:—

"Vom Vater hab' ich die Statur, des Lebens ernstes Führen,
Vom Mütterchen die Frohnatur und Lust zu fabulieren."

By courtesy of the German Railways Inf. Bureau

Goethe's father and mother: a relief by J. P. Melchior (in the Goethe-National Museum, Weimar)

Much has been written about Goethe's mother, *Frau Aja* as she was known to her many friends. Aja was the name of a heroic figure in the folk-lore woven around Charlemagne, and as with Frau Aja of old, so did the Frankfurt Frau Aja, by reason of her sterling qualities, ensure that posterity would honour her memory even had destiny not made her the mother of Germany's greatest poet and thinker. On one occasion she described her own characteristics on the following lines: "By God's good grace no human being has ever left me feeling miserable, no matter what their rank, age, or sex. I love all mankind, and old and young alike feel this instinctively. I do not criticise anybody's conduct; I always try to see the best side of everyone, and leave the judging of the bad side to Him who created man. This philosophy of life keeps me healthy, happy, and joyous."

* * *

Col. Lindbergh's Baby: Broadcasting—

RADIO has been given new opportunities through the kidnapping of the Lindbergh baby. For the first time in radio history, key stations of the two major networks have remained "on the air" all night; and for the first time the public has been acquainted, through broadcasting, with the methods of newspapers in covering stories. When the press associations reported the kidnapping, dance bands were playing in most studios, and the public received its first news of the crime from a night club in Chicago. Networks rushed announcers and engineers to the nearest possible point to the Lindbergh home, installed telephone lines, and prepared to broadcast successive developments. News bulletins were given every hour, and the diet the baby has been accustomed to was read in French, German, Spanish, Italian, and Yiddish, as well as English, and Colonel Schwarzkopf, head of the New Jersey police, spoke from Trenton over WOR asking for the co-operation of the public. Both systems set up special transmitting apparatus at Princeton, where newspaper men and police officials broadcast over nationwide networks the latest developments in the hunt. Short-wave broadcasting and receiving instruments were installed in the Lindbergh garage with the object of despatching radio motor patrols to the scene of any new development. An aeroplane was at hand to transport the short-wave transmitter to any point at which an arrest might be made.

* * *

—and Television Aid the Search

THE resources of television have also been called upon to help in the search. At station W2XAB, on top of the Columbia Broadcasting System building, the baby's picture was broadcast continuously from two to six p.m. on March 3, and at fifteen-minute intervals in the evening. The signal carrying the image had a 1,000-mile radius, and there were several thousand television receivers within that area. Telephone calls from observers who had picked up the baby's image reported that the picture compared favourably with the half-tone photographs in the newspapers. This is the first time that television has been used to familiarise the public with the appearance of a kidnapped person.

ETHERVIATOR.

Goethe Centenary Celebrations in Germany

(From our Berlin Correspondent)

March 20, 1932

THE intensity with which the centenary of Goethe's death (March 22, 1832) is being celebrated throughout his native land broadcasting stations denotes the value set by present-day Germany upon the man whose life is considered a typical example of sane balance and calm optimism in the face of difficulties, political and cultural, as great as those with which his country is now again faced. Goethe's serenity, displayed by his life and his works, is regarded as a powerful national tonic to-day.

(By courtesy of the German Railways Information Bureau

Goethehaus, Frankfurt, Goethe's birthplace

For some months past Königs Wusterhausen—the wavelength of which penetrates German country homes—has been broadcasting lectures on Goethe, interpretations of his works, his world attitude, his plays and his lyrics, with a view to familiarising the man and woman away from the centres of industrial activity with a spirit that united a love of all that was noble in historical tradition with the greatest sympathy for modern developments. Goethe lived at a time when to be attached to a court was the highest earthly goal that a commoner could attain: he was a Herr Geheimrath, taking an active part in the politics of the little Saxon court of Weimar, but at the same time he raised the literary and theatrical reputation of his Grand Duchy to the highest of the day in Germany. He saw the beginning of the age of steam, and took a passionate interest in the development of the new scientific and democratic movement. But he had little or no local patriotism, because he was too intensely interested in each and every movement that went on around him. Germans to-day, then, are experiencing the paradox of Goethe—who felt himself a citizen of the world, and admired the personality of Napoleon, oppressor of the Germans of those days—being held up as the great unifier, optimist, and pacifist. In his works can be found an answer to every question troubling those who smart to-day under the Treaty of Versailles as their ancestors smarted under Napoleon and the wars of liberation.

So universal is the application of Goethe's enormously wide range of thought and experience during his long life that ridicule has been poured upon the many serious lecturers whose topic has been "Goethe and——," the "and" being followed by every conceivable subject from Love to Lawyers. But it is by his life-work, *Faust*, that he stands supreme as interpreter of the German spirit and creator of Germany's great national tragedy. The Goethe dramas on the whole, being beset by psychological riddles and intricacies, have lent themselves badly to adaptation for the wireless. There are enormous difficulties in *Faust* as well, though Berlin made an attempt at Part One on March 10 and is to give Part Two on March 22. But, owing to the many pitfalls already recognised, an attempt was made a few weeks ago to present *Faust* to wireless listeners in the original old folk-version, the puppet drama of Dr. Faust, where there was no psychology, no self-torture, no Gretchen, and no philosophy, but a great deal of the devil and hell-fire, with Dr. Faust himself presented as a mediæval alchemist in a long black robe with a magic wand. As comic relief there was pantaloon, who ridicules most of the worldly and theological theories of the two chief characters. This was well done for broadcasting by Friedrich Burschell. But it was no great success. Just as England would resent any other *Hamlet* than that of Shakespeare, so do Germans demand Goethe's *Faust*, no matter how effective from the point of sound the more rackety and spectacular popular Punch-and-Judy version of the old tale may have been.

But Berlin and north Germany have altogether rather less to do with the Goethe celebrations than have the central and south-west German stations who claim these as their special prerogative. Central and South-West Germany was the Goethe country. The actual celebrations were therefore appropriately opened by Frankfurt on March 11 with a "sound-picture," given by the

The memorial of the flight of Faust and Mephistopheles from Auerbachs Keller

eminent *littérateur* and pacifist, Alfons Paquet, who tried to give the world the idea which he has formed of Goethe's birthplace. Paquet goes so far as to give Frankfurt the honour of having moulded the young Goethe, the child that was father to the man—an inquiring spirit, richly open to receive all the treasures Frankfurt could pour into his mind. For Frankfurt, on the one hand, an historical centre of mediæval tradition and, on the other, a keenly alive trading centre and scene of political conflicts and grandiose pageants, nourished the boy's imagination as much as the fact that the life of the theatre and of the book world was the most vital of that day. Leipzig has since wrested the printing trade from Frankfurt, but it is here that the first edition of *Faust* was printed, and here that the most important illustrators of the day were living when Goethe was a child.

It is no less appropriate that the all-German relay of the Goethe festival concert on March 21, should come from the Gewandhaus at Leipzig. It is expected (at the time of writing this article) that Bruno Walter will be home in time from his American triumphs to conduct the Gewandhaus Orchestra. If not, another of Germany's great conductors will have taken his place. Beethoven's *Egmont* overture and *Eroica* will be given, and three of Goethe's lyrics set to music by Schubert. Goethe left Frankfurt for Leipzig as a student at the age of sixteen, and this, his gayest time as a student, was immortalised in *Faust*. But following the Gewandhaus concert listeners are to be switched on to Frankfurt, where a lecture entitled simply "Goethe" is to be given by Dr. Thomas Mann, Germany's greatest literary figure of to-day

(Photo: Johannes Muhler Leipzig

"Auerbachs Keller," Leipzig, showing the famous barrel which figures in Goethe's *Faust*

after Gerhart Hauptmann. Thomas Mann's Goethe study is the most important literary contribution to the Goethe Year after Hauptmann's great play *Before Sunset* at the Deutsches Theater.

The following day is devoted to Weimar. The central German broadcasting station, Leipzig, will relay the impressive ceremonies that take place early in the morning in Weimar Town Hall, when the President of the Goethe Society will speak, and, a little later, in the Grand-Ducal crypt, where Goethe lies buried, a wreath will be laid upon his grave. The promise has been obtained from President Hindenburg that he will perform this ceremony. At this hour, verging upon midday, all Germany's church bells will ring and gramophone records made (to be broadcast later). The same evening, before the most distinguished audience of present-day Germany, members of the Vienna Burg-Theater will give a performance of *Torquato Tasso* in the Weimar National Theatre, of which all Germany again will hear the first act. Men of letters of various nationalities will broadcast from Weimar in their own languages on the mornings of March 23 and 24. The second part of *Faust* will be given in the evening. On Thursday a particularly important lecture by Professor Farinelli, entitled "Goethe and Rome," will be broadcast. So many Germans have followed in Goethe's steps that his Italian journey is as well known to the nation as any of his plays or lyrics. He himself regarded it as the goal of his ambitions and the climax of his development. He escaped from the Germany of political storm and stress—a Germany of to-day in all that concerns feverish activity, actions, and reactions—with the Revolution just about to break next door in France, and he found in Italy the calmness of classical antiquity under serene skies. It is from this Italian journey hat he derived that perspective from which he was able to view all subsequent happenings in his own country and from which in the "Goethe-Year" his countrymen are expected to derive strength and encouragement. He travelled along by way of Munich and Lake Garda, crossing the Alps by the Brenner Pass, and set forth so secretly that only a servant knew of his plans, so eager was he to give up his spirit entirely undistracted to the new impressions.

The house where Goethe lived in Weimar, now the Goethe Museum. (An engraving by Schütze, after a drawing by Otto Wagner)

The Italian journey was a milestone in Goethe's life. How it affected his message to the world will be gathered on Friday, March 25, when the Viennese view of "Goethe's attitude towards death and immortality" will be broadcast from the Weimar National Theatre by Dr. Franz Koch, of Vienna. Since Vienna is pre-eminently the centre from which to-day's understanding of psychology as a new science has sprung, this lecture is of importance. On Sunday Leipzig broadcasts records made during the week of Goethe Festival performances all over Germany.

These particular ceremonies form only a fraction of the Goethe celebrations, which every wireless station in Germany, as well as every school, university, and theatre, has on the programme of 1932. There are other festivals of peculiar interest which it is hoped may be recorded, if not immediately on the microphone, at least on gramophone records which will be broadcast later. Here the less well-known spots connected with Goethe's name, yet of infinite importance in his own life, will be brought prominently to the fore. There is Bad Lauchstedt, the little Thüringian spa which was the centre of Weimar court gaieties in summer, when actors and actresses used to come and perform for the ducal court, and enjoy holidays at the same time, at the theatre, rebuilt under Goethe's supervision in 1802 and opened with one of his plays. There is yet another famous name connected with Lauchstedt—Richard Wagner was Kapellmeister here in 1834. The original version or "Ur," *Faust* will be given here by the Weimar ensemble in May, and other performances take place during the summer. But most typical of all German Goethe celebrations is the Walpurgis

Continued at foot of column 2, page 578.

The castle of the Grand Duke of Saxe-Weimar, to whom Goethe acted as a life-long adviser

[Photo: Johannes Muhler

The house of Frau von Stein, Lady-in-Waiting to the Duchess of Weimar, and a great friend of Goethe's

Goethe and England

By Dr. GEORG WITKOWSKI, Professor at the University of Leipzig

THE English language was but little known in Germany in Goethe's youth. But Goethe, while still a boy, was taught English by a wandering tutor. A young Englishman, a Mr. Harry Lupton, who was the first fiancé of his only sister, Cornelia, afforded him a good opportunity to continue to practise that language. He made excellent progress, and during his student years at Leipzig wrote quite a number of poems in English. During the same period he came across an edition of Dodd's "Selections from Shakespeare," thus making his first acquaintance with the great poet. From that time onward Goethe looked upon Shakespeare as the liberator from the poetic conventions of his day, modelled as they were on the French school of thought. When twenty-two years old Goethe delivered a Shakespeare Day oration, and in it occurred the following phrase: "The first page of Shakespeare which I read resulted in my vowing to follow him for the rest of my life, and when I had finished reading the first play I stood in amazement; I felt like one who, born blind, has by some miracle had his sight restored in an instant."

Goethe's first great drama, *Götz von Berlichingen*, is a work the whole inspiration of which is Shakespeare. All his life Goethe was an admirer of the great Englishman, as witness his famous essay, "Shakespeare und kein Ende" (Shakespeare and No End) and the numerous Shakespeare productions on the Weimar stage which Goethe directed for more than twenty-five years.

But English literature of his own time attracted him also to no small extent; when at Sesenheim he read out *The Vicar of Wakefield* to his fiancée, Friedrike Brion. Together with his friend Merck he edited an English edition of the works of Ossian, and *Werthers Leiden*, written in the form of letters, clearly shows the influence of Richardson. This novel, which established Goethe's world reputation, appeared again and again in English translations, and to numerous English artists it served as a subject for their pictures and engravings.

When at the end of the eighteenth century the "Lake School" gave a new direction to English poetry, Goethe became its leader. It was from Goethe that Wordsworth, Coleridge, and Southey received their strongest intellectual stimuli. English romanticism was based on those qualities which were first heard in the German "Sturm und Drang" (Storm and Stress) period under the leadership of Goethe—*i.e.*, echoes of Nature, the reign of natural sentiment rather than of regularism. Under the influence of the same school Sir Walter Scott translated *Götz von Berlichingen* into English at about the time when Goethe, working at *Faust* (which, by the way, contains two songs by Shakespeare, freely remodelled), received strong suggestions from Milton's *Paradise Lost*.

But it was Thomas Carlyle who worked hardest and most effectively for the appreciation of Goethe in England. He translated *Wilhelm Meisters Lehrjahre*, he wrote numerous articles and essays on Goethe in the most prominent journals, culminating in the wonderful obituary on Goethe's death in the *New Monthly Review*. The German poet valued Carlyle's support all the more since he was striving in the latter part of his life to bring the nations of the world closer together by means of a mutual exchange of their intellectual treasures—in other words, to establish a literary League of Nations. An animated correspondence developed between the two thinkers, and Carlyle acknowledged that it was largely due to Goethe's writings that he struggled through from darkness to light.

Of course, two such totally different natures as those of Goethe and Carlyle never could reach an absolute *rapprochement*. His relations with Scott, too, remained rather superficial, although Goethe considered him "the most prolific, ablest, and most famous novelist of his century." Warm affection, amounting to sincere love, he felt only for one poet of his time, one whom he considered equal in rank, Lord Byron. Goethe recognises in *Manfred* strong influences of his *Faust*. He sees Byron's wonderful talent demonstrated far more astonishingly in that work of genius *Don Juan*. As Goethe expresses it: "Since we know and appreciate the author, since we do not wish him to be other than he is, we enjoy gratefully what he dares to present to us with such excessive liberty, nay, audacity." Goethe considered Byron as great as Shakespeare so far as conception of externals and a clear penetration into past conditions were concerned. He thought him the only great poet of his day, one who was neither antique, in the classical sense, nor romantic, but rather a modernist of his own day. By connecting in *Faust*, Part II, the Choir's lament for Euphorion's early death with the lament for Byron, he has built to his beloved poet an eternal monument.

During Goethe's last years writers from the whole civilised world went on a pilgrimage to Weimar in order to pay homage to their great leader. One of the last to go there, on October 20, 1830, was Thackeray. Goethe received him, his hands, as usual, on his back. Thackeray reports that Goethe's complexion was still rosy, his eyes extraordinarily dark, penetrating, and sparkling, his voice rich and agreeable.

Eckermann (Goethe's Boswell) in the last of the conversations with Goethe, which he has handed down to us, tells us that Goethe counted Shakespeare with Raphael and Mozart among the greatest geniuses of mankind. Their works cannot be considered other than that they were "breathed on invisibly" by the Deity. One of his most treasured possessions was the seal which was presented to him by fifteen English friends—Thomas Carlyle and Walter Scott among them—on the occasion of his last birthday. On it were inscribed his own words: "Ohne Rast, doch ohne Hast" (Never resting, but never hurrying). He expressed his thanks in a warm-hearted poem.

After Goethe's death the *Times* and the *Morning Post* published, first of all, the obituary notice by the Frenchman Girardin. This was followed, in the *Monthly. Repository of Theology and General Literature*, by ten articles on Goethe, written by Henry Crabb Robinson. The latter had studied at Jena. He then translated Goethe's *Prometheus* into English, and later, on his return to London, gained a prominent position for the German poet, especially in Charles Lamb's circle. But the highest tribute paid to Goethe a hundred years ago is still that of Carlyle. He counted Goethe among mankind's great seers among those who probe into the secret of the Universe and who decipher a new meaning in the message of the heavens. He sums up his tribute by saying: "In Goethe's books—almost as in ancient times on the rock of nature—is to be seen the foundation of a new edifice of human society. We see here extensive traces of outlines which future ages may extend, improve, and realise."

Carlyle's writings on Goethe in their rather exaggerated style were not by any means universally approved of. Thus the Puritan, Norman Andrews, wrote indignantly at the time:—

"We doubt whether any English writer has yet attained to the mystic, transcendental, exalted style of the article in the *New Monthly*. We had thought that the force of folly could no further go. But the same author (evidently the same) reappears with more elaborate display in the article in the *Foreign Quarterly*; some passages of which, taken from their connexion, would produce a conviction in most readers, that they were parts of a burlesque too extravagant to be amusing."

[Photo: Atelier Helioneum, Leipzig.

The Goethe-Schiller monument before the National Theatre, Weimar, of which Goethe was a director for many years

GOETHE CENTENARY CELEBRATIONS

(*Continued from page* 577)

Festival on the Brocken on April 30. Goethe undertook four journeys to the Harz Mountains in quest of geological specimens for the scientific studies in which he took so passionate an interest. To climb the Brocken in those days was something of a feat. Goethe stayed at a small inn built of wood, (since burned down), and doubtless little more than the original charcoal burners' hut, but German thoroughness has endeavoured to give comfort to those who follow in his footsteps, while preserving at the same time as much of the romantic atmosphere of the witches' dancing-ground as possible. This year efforts will be made to observe what is left of Walpurgis night in local folk-lore legend appropriately and to broadcast the results.

Haydn's Year

By FRANCIS GRIBBLE

THIS is Haydn's Year. Musical societies are everywhere celebrating the bicentenary of the great man's birth; and a glance at the incidents of his long life carries us back to a time when, even in musical centres, professional musicians could lay no claim to social importance. Many of them received patronage. A few of them flourished on it. But the patrons and the patronised were separated by a wide social gulf.

It was so in Austria in Haydn's time. He was sixty before he woke up and found himself famous. Throughout the years during which he was composing the works which gradually made him famous, his position was that of a sort of upper servant—rather more important than the footmen, but rather less important than the butler—in the establishment of the illustrious House of Esterhazy.

Most of the Austrian and Hungarian magnates of those days maintained orchestras for their own diversion and the entertainment of their guests in both their town and country houses; and Prince Paul-Antoine Esterhazy, who was the richest and most distinguished of the magnates, engaged Haydn as his musical director. Their agreement, which was signed on May 1, 1761, has been preserved; and one has only to run one's eye over it in order to realise that, in the eyes of these eighteenth-century magnates, a musical director was simply a menial who had acquired certain pleasing accomplishments, but must nevertheless be kept in his proper place.

Haydn had to undertake to be "sober, polite, and modest," as became a "household retainer," to wear "clean linen," and to take care that his wig and the wigs of the musicians under his orders were always properly powdered. He had to promise to set the musicians a good example, and keep them in good order and compose any quarrels which might occur among them without bringing such "silly trifles" to the notice of his Highness. He was also to give singing lessons to the ladies of the company, and to present himself in the ante-chamber every day, both before and after dinner, in order to ascertain whether his services and those of his orchestra were required. His own meals were to be taken at the table of the upper servants, and his salary was to be 400 florins a year, payable in quarterly instalments. He might be discharged without notice if he failed to give satisfaction.

That was his status for more than thirty years.

He gave complete satisfaction. His stipend was repeatedly raised. When the third member of the Esterhazy family whom he served decided to dispense with music, he was given a substantial retiring pension. But though his compositions had, long before that, earned him a European reputation, we have to picture him still, as a man of nearly sixty, dressing up, every day of his life, first in a crimson and then in a sky-blue livery, and presenting himself in the ante-chamber, to enquire respectfully whether His Highness desired to dine to the accompaniment of music.

He did not like it. He liked it less and less as he grew older, though his magnate was always good to him, and his musicians loved and respected him and called him "daddy." During his occasional visits to Vienna, he was welcomed in bourgeois society and got glimpses of a richer and fuller life than that which he was living in his gilded cage; and we have an interesting letter, addressed to one of his Viennese hostesses, in which he complains, half-playfully and half-peevishly, of the discomfort which he has to endure at Esterhazy's country seat:

[Oesterreichische Lichtbildstelle

Haydn at a Rehearsal of his Quartets. (The well-known picture by Julius von Schmidt)

"Here I am, back again in my solitude, forsaken, like an orphan, almost without human society, melancholy, recalling the delightful days which have unhappily passed, and not knowing whether they will ever return. . . . Everything here is upside down. For three days I have hardly known whether I was a chapel master or a chapel valet. . . . I can hardly sleep. The draught from my bedroom window nearly blows off my night-cap; and I have lost twenty pounds weight in three days because I can no longer get the beautiful pastry which I used to eat at Vienna, and there is no dear friend to say to me: 'Do you like your chocolate with or without milk? Will you have your coffee black or with cream? May I offer you a vanilla or a pineapple ice?'"

His renown in the world of music when he wrote that was almost as great as that of Sir Edward Elgar at the present day; and it is no wonder, in view of that renown, that he found his position as a dependant galling, and was relieved when the time came for him to escape from it. But we must not insist. The letter was probably the exaggerated expression of a passing mood. His dependence, after all, was the price which he was paying for success in life; and he was, on the whole, in spite of occasional fits of despondency, a cheerful man. His music was cheerful—too cheeerful for some of his critics, who remonstrated with him because his Masses seemed to them to strike too jovial a note for a devotional occasion; but he replied to their reproaches:

"I cannot compose in any other way. When I turn my thoughts to God, my heart is so full of joy that the notes come splashing out as if from a fountain; and, as God has given me a jovial nature, no doubt he will forgive me for serving Him jovially."

Even an unhappy marriage and an unsatisfactory love affair failed to destroy Haydn's serenity, though they probably ruffled it, for both his wife and the other lady treated him very badly. The former used to tear up the manuscripts of his musical compositions whenever she wanted pastry trimmings or curl papers. The latter—a married woman—was constantly asking him for money, but preferred, as a widow, to marry a younger man when Mme. Haydn's long-delayed death made him once more eligible at the age of 68. And that in spite of this strange promise which he had signed, sealed and delivered to her:

"I, the undersigned, promise Signora Loisa Polzelli that, if I should ever think of marrying again, I will marry no one except the said Loisa Polzelli; and I promise the said Loisa Polzelli that, if I prefer to remain a widower, I will leave her after my death an annuity of three hundred florins in Viennese currency. As a pledge of which I append my signature, which may be produced before any court of law:

"JOSEPH HAYDN, Master of the Chapel to His Highness Prince Esterhazy.—Vienna, May 23, 1800."

It is not a romantic story; and there is no inference to be drawn from it except that Haydn was a simple-minded old gentleman and Loisa Polzelli a mistress of inconstant disposition but with a very keen eye to the main chance. One must note, however, that though Haydn still signed himself "Master of the Chapel to Prince Esterhazy" in 1800, he was no longer discharging the duties of that office, though he was allowed to retain his title.

The actual date of his retirement was 1790. He established himself, as soon as he retired, in a modest house in the suburbs of Vienna; and he had hardly settled down in it when the arrival of a caller with whom he had merely corresponded proved to him that he was more famous and had a greater commercial value than he had imagined.

"I am Salomon, of London," said his visitor. "You must come to London with me and compose an opera, six symphonies, and twenty other pieces. You shall have £300 for the opera, £300 for the symphonies, £200 for the right of printing these works, and £200 for the other compositions, together with a benefit, at the end of the season, guaranteed to bring you a further sum of at least £200. I am prepared

to deposit 5,000 florins in an Austrian bank as a guarantee of good faith and to hand you 500 florins for your travelling expenses."

Haydn closed with that offer and so, towards the end of his life, achieved fortune as well as fame. Everyone made much of him in London. He visited Sir Joshua Reynolds's studio, when he was painting the portrait of Mrs. Billington,

[By courtesy of the Royal Academy of Music

Joseph Haydn: an engraving by A. Weger, Leipzig

the famous actress, and paid that lady such a charming compliment that she fell on his neck and kissed him. His benefit concert brought him not £200, but £350. The Prince of Wales invited him twenty-six times to Carlton House, where the Princess of Wales played and sang with him; and he brought away from Carlton House a royal recipe for the concoction of punch which is thus reproduced in his note-book:—

"Prince of Wales's punch—one bottle champagne, one bottle burgundy, one bottle rum, ten lemons, two oranges, pound and a half of sugar."

He paid a second visit to London in 1794, remaining until August, 1795. He was pressed to settle down in England and become a British citizen; but he declined the proposals made to him. He had done well, having earned 24,000 florins. It was not such a fortune as eminent musicians may hope for in these days; but it assured him a comfortable competence, and he preferred to enjoy his comfort—and his Tokay—among his own people.

His work was not yet done. It was not until after his return to Vienna that he composed the most famous of his oratorios, *The Creation*, which was produced, not only there, but also, in the midst of the Napoleonic wars, in London, Paris, St. Petersburg, and Lisbon. But old age was approaching, and he saluted its advent by inscribing on his visiting cards the words: "Hin is alle meine Kraft; alt und schwach bin ich" ("My strength is exhausted; I am old and weak").

He had no children. The rumour, once current, that he was the father of one of Loisa Polzelli's children seems to have been untrue. His musician brothers were dead; and though he had a number of nieces and nephews to divide his inheritance, they were only artisans and small tradespeople, and he had little in common with them. So his old age was lonely; and its loneliness was relieved only by the calls of visitors who came to satisfy their curiosity or to lay the tribute of their homage at his feet, and who found him sipping his Tokay, surrounded by the innumerable snuff-boxes bestowed upon him, in the course of his long life, by kings and queens and princes and princesses.

His last visitor, as it happened, was an officer in the army of his country's worst enemy. It was shortly after the battle of Wagram. He had heard the thunder of the guns, and had tried to reassure his household, saying: "What are you all afraid of? No harm is going to happen where Haydn is." But then he had felt faint, and taken to his bed; and while he was lying there, one of Napoleon's officers came to him, sat with him, talked to him, and then went to his piano and sang one of the great airs from *The Creation*: "Mit Würde und Hohheit angethan."

Haydn, overcome by his emotions, and too feeble to speak, embraced him, as a sign that, even in the midst of war, the love of art made

[Photo: Lothar Rubelt

Haydn's Viola da Gamba

the whole world kin, and then relapsed into a torpor from which death released him a few days afterwards.

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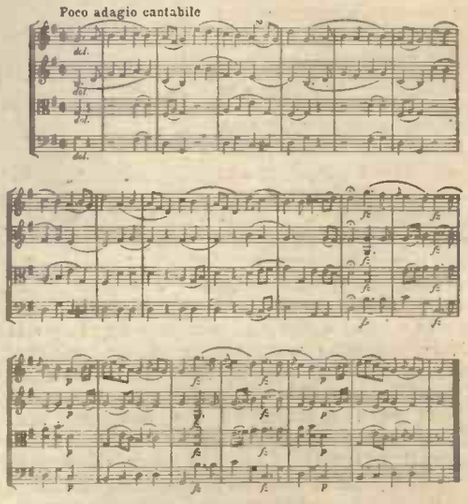
each of them the most beautiful woman he had ever seen. Of one, especially, he cherished tender memories all his life.

He saw both Universities, Cambridge as a sightseer, and Oxford when it made him an honorary Doctor of Music. Three Concerts were given in his honour there, and his appearance at the third, in his doctor's hood, was the signal for tremendous enthusiasm. His "Doctor's Exercise" is a fascinating example of his skill and humour, a little three-part canon which makes equally good music whether read the right way up or upside down. He visited Windsor and many other interesting spots, and, by way of completing his survey of the English as they really are, went to the Ascot race-meeting. Only devotion to his native country and his work there, availed to send him home, after winding up his series of London concerts "with the greatest éclat," as the *Morning Chronicle* records. But within eighteen months he had accepted a second invitation, and was here again, as successful and happy as before.

Haydn in England

WHEN Salomon brought Haydn to England on his first visit to this country, the journey took more than a fortnight; the passage from Dover to Calais alone, on New Year's Day, 1791, was an affair of nine hours. But London's welcome must have made ample amends for the hardships of the route: seldom has any visiting artist been honoured as he was, and a parallel in our day is no easy thing to imagine. After a short stay in other quarters, he settled down as Salomon's guest in Great Pulteney Street, and the house at once became the centre of social and artistic London. Everyone who was anyone in the world of music or of fashion, hastened to pay his respects to the master, and invitations poured in from all quarters. On the concerts which were the real object of his visit, there is no need to enlarge; the whole world knows and treasures the *Salomon* symphonies, the *Creation*, and the *Seasons*, which it owes directly to that London visit. The *Emperor's Hymn* was inspired by England, too; Haydn was so much impressed by our National Anthem that he determined to give one of its own to Austria. How successfully he adapted one of his native Croat melodies to that noble end is as well known as anything in music's history. But throughout his stay with us, as on his second visit in 1794, it was the scale on which we did things that delighted him. His own music brought him recognition and rewards such as he had never thought possible, and he attended one of our typically English undertakings which must have been the loudest music he had heard till then—a Händel Service in Westminster Abbey.

He was a guest at two Lord Mayor's Banquets, and learned something, too, of English country life and hospitality. It was on a visit to the Duke of York at Oatlands that Hoppner painted the portrait which is now at Hampton Court. The Duchess, the "liebe, kleine," seventeen-year-old Princess of Prussia, who had been married only for a few days, was a good musician: she took a keen delight in all



The Emperor's Hymn (from Opus 76, No. 3), the air with which German stations close the day's programme.

the music Haydn made for the household, and even induced him to sing. The Court of those days was genuinely musical, and many members of the Royal House were capable performers. They were as enthusiastic as anyone in England in making the most of Haydn's presence. He quite lost his heart to the little Princess, and at least twice again described his hotesses in superlatives, calling

(Continued at foot of previous column)

"Hilversum and Huizen"

By YODELLER

THE EDITOR,
DEAR SIR,—

Following your extremely lucid explanation on the above subject in the March 4 issue, I was called along to elucidate a few points which still appeared a little hazy in the mind of a friend who happened to be in bed.

My friend is a Frenchman and, I have since decided, of a somewhat feeble intelligence. Having read your explanation on the slightly complicated matter of the two Dutch stations and their wavelengths, the whole thing appeared to me to be perfectly clear, so clear that all doubts on the subject had been completely removed in my own mind, and I started off on my explanation in my fluent French with perfect confidence.

"Ecoutez, Monsieur——" I began—perhaps it would be as well if I translate our conversation into English. ". . . for a certain period of the year, Hilversum is Huizen and Huizen is Hilversum, you understand?"

"Parfaitement," replied my friend, screwing up his eyes in a frown of puckered concentration.

"And Hilversum has a wavelength of 298.8 metres, while Huizen occupies the 1,875 metre position on our *World-Radio* chart."

My friend expressed a ready comprehension of this easily-understood matter.

"Now," I continued, "at the end of a certain period, Hilversum will become Huizen and Huizen will become Hilversum. That is to say: Hilversum will occupy Huizen's wavelength and Huizen will occupy Hilversum's wavelength—but——" I paused to consider how best to word the matter in colloquial French. "Hilversum is not really Huizen—it is, as a matter of fact, still Hilversum, and is only temporarily acting as Huizen. In the same manner, Huizen cannot be said to be Hilversum, for it is still Huizen—but is momentarily acting as Hilversum and——" my friend interrupted me, bidding me take down the gin bottle and vermouth from a shelf and mix myself—and him, a little drink. I did so, raised my glass, murmured "A votre santé," emptied the glass and absently filled it again.

My friend drained his second glass, toasting "Hilversum et Huizen" with fervour. I continued:—

"So now we have that much clear. At the moment, Huizen is Hilversum, and Hilversum is Huizen——'pas? This being the case, alors——"

"Pardon—un moment," my friend interrupted me. "Vous avez votre journal—*Vorld-Raaadio?*"

I nodded, handed over my current copy, and watched him rummage through the pages until he came to the day's programmes.

"Donc——" murmured my friend, with what I thought—though I may have been mistaken—to be a certain sly gusto. "Tell me, cher S., is this programme"—— he jabbed the page with his thumb, "which *Vorld-Raaadio* calls Huizen really Huizen, or is it the programme of Hilversum——?"

I "gratted" my "tête," regarded the programme carefully, and poured out a third glass of "Gin and It."

"Cher ami," I said, forcefully. "It is so perfectly simple, I cannot understand how you find any diffic——" I paused, hesitated a moment, then went on with quiet certainty. "Of course, here, in this page, Hilversum is Hilversum and not Huizen, while Huizen is Huizen and by no manner of means can it be termed Hilversum or respectively Huizen——"

"But I thought you said that Hilversum was Huizen and Huizen was Hilversum at the moment——" protested my friend excitably.

(Continued on page 582)

A trial run of the B.B.C. official launch before the Oxford and Cambridge Boat Race, 1932.

"HILVERSUM AND HUIZEN"

(*Continued from page* 581)

"Er—just so, but on the programme Hilversum isn't Huizen, it is Hilversum, for if Hilversum is Huizen, it couldn't possibly be Hilversum——"

"Par contre—Huizen isn't Hilversum, but Huizen then; and that is to say, Huizen is in reality—another drink, Monsieur——?"

I shook my head, passing one hand across my forehead with a gesture intended to clear away a little of the difficulty which was beginning to beset me. It must have been the wine, but I certainly found things a little less clear than they had been when I set out on my sea of explanation. After all, this Frenchman *should* understand. It had all been so clearly explained. I found my anger rising.

"Shall we put it this way, then," I said; against my will my voice grew louder. "Supposing, just by way of argument Hilversum is——"

"Huizen——"

"No," I cried. "Hilversum; and Huizen is Huizen——"

"But you have just told me that Huizen is not Hilversum but——" My Gallic friend's bad humour was beginning to show in the way he spoke. I cut him off sharply.

"Nothing of the sort," I said, wrathfully. "I merely suggested that when Hilversum was Hilversum, you simply looked in the programme against the column marked Huizen and——"

"Imbecile!" shouted my friend, throwing back the bedclothes and sliding his feet to the floor. "Attendez! I get my crayon and bloc and we shall see this all on paper, no!" He seized his crutch—he has a leg injury, sustained while ski-ing on the Tour d'Ai—and hobbled across the room, looking irresistibly comic in his long nightshirt, below which his thin ankles projected above a disgraceful pair of bedroom slippers. "Venez——" He sat down at the table, throwing his crutch to the floor, and commenced to write. "Hilversum—comme ça—Huizen—comme ci. Maintenant——"

"Put 298.8 metres against Hilversum," I told him, forcing myself to speak calmly.

"Deux cent quatre-vin——" started my friend, and suddenly stopped. "Non—not so! That is for Huizen."

"Hilversum," I contradicted him, beginning to feel that the idiot would never see reason.

"Huizen," he repeated, and started to put down figures. I seized his pencil. He leapt to his feet and, picking up his crutch, held it at the "stomach point" position, right hand at the small of the butt, left hand up beyond the trigger guard—I mean—I hardly know what I *do* mean. All I know is that I leapt back, well out of reach of the out-thrust weapon, the pencil clutched tightly in my hand.

"Calmez vous," I said, with pacific intention. "Hilversum is——"

"Huizen!" he roared, a mad light in his eye, and lunged forward.

With precipitate haste I leapt aside.

"Hilversum," I spat in his face, and picking up a French dictionary which lay close at hand, threw it hard at my assailant. It was no time for thought on the ethics of the business. Sick man or not, I had my own life to think of. The fellow hopped across the room after me, pausing to cast a water carafe at my head, but I dodged this nimbly. I have an idea a head poked round the door of the room and quickly withdrew.

"Hilversum—Huizen—Hilversum—Huizen," mouthed the Frenchman as he followed me round the table at the far end of the room. I promptly ducked under the table, threw myself over the bed and grabbed *World-Radio* in my hand.

"Read it—read it!" I yelled, brandishing the journal, opened at the Editorial, in my hand, thinking this might side-track his murderous thoughts.

"*Vorld-Readio!*" roared the fellow, a crazy lunatic now, if ever there was one. "Ahhhhhh——" He grasped the bed, supported himself with one hand and threw his crutch at me with the other.

I drew back, slipped up on the polished floor and went down backwards on my head. My last thought I remembered distinctly was "Horror, oh, horror! Alone with a maniac!"

[Extract from a letter recently received.—ED.]

The Editor, *World-Radio*

DEAR SIR,—Called hurriedly by telephone the other evening, I went along to the clinic "Mont Riant," where I found my husband suffering from concussion of the brain. He was quite insensible and clutched in his hand the current number of your journal. He muttered constantly something which sounded like "Huizen-Hilversum-Huizen-Hilversum," for hours, and at times I feared for his life. I may say, however, that he has now recovered a little. A friend of my husband, a Frenchman, is also in a serious condition and has not yet come round from a seizure. Curiously enough, he is *still* crying at frequent intervals the same queer jumble of words I heard from the lips of my husband.

Now, Mr. Editor, as a result of judicious questions to my husband, I understand that all this trouble has been caused by an article inserted by you in your journal. Such articles may appear to you to be necessary for the information of your readers, *but*, if you would value a man's sanity and a poor, helpless woman's peace of mind, I beg—nay, implore—you to refrain from ever again mentioning the dreadful words "Huizen and Hilversum" in the columns of your esteemed publication. . . .

Programmes *You* Like

THE Beethoven Symphony draws to its glorious close. You wait expectantly for the next item. What will it be? A Mozart Concerto? Or something of Bach's? Or a masterpiece of modern music? Eagerly you wait to hear.

Ah, Beethoven again! Amidst the torrent of foreign words you distinctly catch his name. But the voice goes on. No doubt it is describing the various movements which make up the symphony or concerto which is to follow. You wish you could understand the language.

Then you suddenly get a nasty shock. "Tootie Thompson!" That doesn't sound like the name of a concerto soloist! The announcer's next words confirm your fears. Despite the foreign intonation, there can be no doubt about what the words were: "Won't Someone Love Me Just a Little Bit?" The Beethoven reference then must have been to what had gone before and not to what is to follow. Confound the versatility of these foreign gramophone broadcasts!

Hurriedly you glance across at your wife. But it is too late! She, too, has overheard the request for a small portion of affection. Her Beethoven lethargy has slipped from her. She eagerly awaits Tootie Thompson and her moaning sentimentalities. She checkmates your impulsive move towards the set. "No, don't let's get another station just yet. This seems quite a good concert, don't you think?"

Defeated, you leave your dials untouched and take up your book; victorious, she puts down her book.

Now, don't tell me this sort of thing doesn't happen in your household, because I shan't believe you! In different households the details may vary; it may be your wife who likes Beethoven and you who appreciate Tootie; or you may have similar tastes to one another which conflict, however, with those of the relatives who visit you from time to time. But in every home this silent conflict, to switch or not to switch over to another station, crops up from time to time!

If you take the trouble to study the technique of the thing, you can nearly always manage to be on the winning side!

The first step that the practised listener must take to ensure wandering about amongst the sorts of programmes which he (or she) likes is to be careful to sit nearer to the set than anyone else! Then he tunes in to a programme which attracts him.

If anybody protests, he reminds them that a great many of these foreign broadcasts are composed of gramophone records of a great variety of types. "Probably you would be very sorry indeed to miss the record which will follow this one!" he prophesies.

Then he sits back in silent enjoyment, whilst dissenters sit back in noisy hope of something more suited to their tastes as the next item.

Immediately the item ends, he breaks animatedly into the conversation. There is quite a knack in pitching your voice so that you can hear the forthcoming announcement from the loud speaker, whilst successfully preventing your audience from being equally fortunate!

You can usually gauge what type of item is about to follow. The name of a composer or a dancey-sounding title amidst the welter of unintelligible foreign words generally gives the clue to the practised listener.

If it seems probable that your tastes will be satisfied, you just go on listening. If, however, it seems improbable, you quickly tune out the station before the item can start. Give it no chance to rivet your companions' attention!

(*Continued at foot of next column*)

"Perhaps, after all, you *would* enjoy another programme better," you murmur casually, searching for one that they won't, but you will.

In this way you can always be certain of listening to a programme which you thoroughly enjoy, whilst your companions spend the time in hoping for better luck with the next item.

But one important point! Before putting these hints into practice, make sure that your adversaries don't see this article! Tear the page out of their copy of this paper if you possibly can! Because, if they learn, too, how to ensure listening to the programmes which *they* enjoy, it may prove awkward when you both try putting your artfulness into practice!

R. A. S.

Letters to the Editor

"Double-Dutch."

To the Editor of WORLD-RADIO

SIR,—At 8 p.m. to-night the programme published in *World-Radio* under Hilversum was being transmitted on 1,875 metres, and that under Huizen on 298.8 metres. The former, I understand, is the Hilversum transmitter and not the Huizen as *World-Radio* has it, and the latter Huizen, not Hilversum. If this is correct, then surely you *are* slightly muddled, or if not, can you please see that the notices in *World-Radio* are altered. In any case, the situation is, I admit, Double-Dutch.

Yours truly,

A. H. BRIDGES.

Hove Villa, Dyke Road, Brighton.
March 14.

[Our correspondent is misinformed—but not by us. The "Hilversum" programme is at present radiated by the Huizen transmitter (on 1,875 m.), and *vice versa*, as stated in the respective programmes.—ED.]

Dominion and Foreign Broadcasting Intelligence

Radio and the Coming Eclipse

Scientific Preparations in Canada

(From our Montreal Correspondent)

The eclipse of the sun which will occur this year on August 31 will provide scientists with a rare opportunity to study radio problems and phenomena now of interest to millions the world over. The effect of the sun's and other rays of cosmic origin on wavelengths and "fading" as yet unsolved by scientists or radio engineers will be studied. Magog, Lake St. Peter, and Acton Vale, in Quebec, are in the central portion of this year's eclipse area, and it will be here that the important observations will be made. The western edge of the band, which is about 100 miles wide, will be a few miles west of Montreal.

The observations will be carried on by the National Research Council in co-operation with the University of McGill and the University of Toronto. Equipment already available in the National Research Laboratories here, where radio problems are being investigated, will be moved to points in the eclipse area.

Distinguished scientific parties are expected from Canadian centres, from Great Britain, the United States, and other countries. Dr. D. C. Rose, of the National Research Laboratories, who is a Canadian graduate of Cambridge University, has been invited to be a member of a party from Cambridge, which is being organised by Lt.-Col. F. J. M. Stratton, Professor of Solar Physics. Ordinarily the size, shape, and components of the solid portion of the sun can be studied with astronomical instruments any time the sun is shining, but the gaseous atmosphere (chromosphere and corona) around the sun can only be studied during an eclipse when the excessive light from the main body of the sun's surface (photospher) is stopped by the moon passing between the sun and the earth. This is done by a study of the spectrum of the light sent out by the chromosphere and corona. It is spectroscopic work which the party from Cambridge contemplates. The observations will be made from Magog, Quebec.

AUSTRIA

Haydn Celebration Broadcasts

(From our Vienna Correspondent)

The Easter broadcasting event here will be the transmission to America, *viâ* Rugby, of the concert of the "Vienna Singing Boys," the name now given to the choristers of what was formerly the Imperial Chapel in the Hofburg Palace in Vienna (Schubert was once one of them). From 7 p.m. to 7.30 p.m. (2 p.m. to 2.30 p.m. in New York) on Easter Sunday they will sing some of their favourite songs in the Ravag studio. Easter Monday, from 10.10 a.m. to 11.30 a.m., will be devoted by Ravag mainly to the relay of the ceremony at Rohrau, the birthplace of Joseph Haydn on March 31, 200 years ago. The speeches of President Miklas and Chancellor Buresch will be relayed, and the President will plant an oak tree in the courtyard of the little house which was the great composer's birthplace. There will be singing by a number of choral associations. A Haydn memorial tablet (upon the cottage itself), by Herr Schmidt, the Austrian sculptor, will be unveiled, and wreaths will be laid upon the monument in the Castle Park. Cardinal Archbishop Piffl will celebrate High Mass at Rohrau on Easter Monday at 9.30 a.m. There will be a relay from Linz on Easter Sunday, at 8.35 a.m., of the chimes and trumpet-fanfare which signal the entrance of the Bishop into his Cathedral.

CZECHOSLOVAKIA

(From our Prague Correspondent)

Licence Statistics

The number of Czechoslovak listeners is increasing slowly but continually. A year's growth may be illustrated best by comparing the total of 397,591 listeners last month with 322,683 a year ago. The January increase amounted to 15,171 subscribers.

A Prospective Short-Wave Station

The interest of Czechoslovak radio clubs is centred upon the preparations being made for the erection of a national station working on a short wave. The 1932 budget of the Ministry of Posts and Telegraphs contains already provision to this effect. The station is designed for contact with overseas countries, and for the distribution of the radio service within the whole of the country's territory. It will be remembered that Czechoslovakia has an elongated shape from west to east, the respective distance being equal to that between London and Milan. The close allocation of the present wavelengths, with particular reference to Czechoslovakia, makes it almost impossible for the existing arrangement to bring the service to the doors of every citizen in the easternmost corner of the country, especially if we take into consideration the majority of the receivers which are not always of the best selectivity. The only remedy would be the utilisation of a short-wave station which would allow more liberty of movement. The construction of such a station is therefore necessary. It is, of course, a work the realisation of which will take perhaps years.

DENMARK

(From our Copenhagen Correspondent)

Licence Fees

According to a decision by the Minister of Public Works, listeners in Denmark are to pay a licence fee of 10 kroner (about 11s.) for the financial year from April 1 next to March 31, 1933. Licences taken out during the period from December 15, 1932, to March 31, 1933, will be reduced to 5 kroner for the remainder of the financial year.

A New High-Power Station

During the last year listening in Denmark has suffered by reason of the high-powered broadcasting stations in neighbouring countries. It has been found necessary to remedy this situation, and a new high-power station at Kalundborg is in course of construction. When the new station at Kalundborg is finished the present station will be used as a relief station for the weaker station at Copenhagen. The Copenhagen station is now situated in the middle of the town, but the new Copenhagen station will be placed outside the town.

FRANCE

Radio Toulouse

(From our Paris Correspondent)

During Lent a sermon has been given each Sunday at 8 p.m. in the old language of Oc. In the middle ages the language spoken to the South of the Loire was called Oc and that spoken to the North was called Oïl. Both of these languages were of Latin origin and derived their names from their different manners of pronouncing "yes," which in one language was "Oc" and in the other "Oïl" ("Oui" in modern French). Gradually the Duchy of Paris absorbed the southern provinces and the Oïl language drove out the Oc. Modern French is the present-day form of the Oïl language, and the Oc language still remains as a dialect in certain parts of France (the Gascon, Catalonian, Provençal, Savoy, and other dialects).

GERMANY

West German Relay Stations Closed Down

The West German broadcasting authorities announce that the transmitters at Aachen, Cologne, and Münster are closing down as from March 21. It is believed that the field strength of the new Langenberg transmitter is sufficiently great to cover the territory served by these relay stations. Nothing has yet been made public with regard to the disposal of the plant or the future use of the wavelength of 227.3 metres. Representations are being made, however, for the removal of two of the closed-down transmitters to the southern part of the district (perhaps to Siegen and Coblence) since the audibility of Langenberg is weak in that region. The studios at Münster are not affected by the closing down of the transmitter.

ITALY

Microphones and Loud Speakers in St. Peter's, Rome

(From our Turin Correspondent)

On the occasion of the inauguration of the Vatican Academy of Science the Pope again affirmed that the Roman Catholic Church has always favoured the progress of the sciences. In November last his Holiness himself performed the inaugural ceremony in connexion with the new electrical apparatus for the functioning of the bells of St. Peter's, which now makes them audible over the whole of the City of Rome. Further, there is now news from Rome that tests have taken place with the microphones and ten loud speakers which have been installed in the Basilica of St. Peter's. By means of these the ceremonies and the words of the Pope are now carried to every part of the vast Basilica. Moreover, by means of a connexion with the Vatican station it is possible to radiate throughout the world the messages that the Pope may broadcast, from the microphone of his private apartment, on special occasions such as pilgrimages and official receptions.

U.S.A.

(From our Chicago Correspondent)

Auditions for Government Officials

In a special studio, at Washington, D.C., officials of the Department of Agriculture are receiving voice tests daily in preparation for broadcasting. Suggestions as to the delivery of speeches and general advice on the preparation of talks are made by the Chief of the Radio Division, who is in charge of all auditions.

Anti-Hoarding Broadcasts

As a result of the President's Anti-Hoarding Campaign, which is broadcast six nights weekly, it has been estimated that about £4,000,000 (at par) has been returned to circulation.

Sponsored Programme from Japan

Sponsored programmes from the Far East will be heard soon by Western listeners. The Lucky Strike programme heard recently over the NBC network included numbers by the orchestra in the Imperial Hotel, Tokio. History is being made when such far-reaching connexions are established. Another distance programme will be heard from Berlin, in a re-broadcast of the Berlin Philharmonic Orchestra, over NBC network. This programme will also include a speech on the Life of an American Woman in Russia.

TECHNICAL SECTION

The Boat-Race Relay

A description of the apparatus employed, written by the B.B.C. Research Department Engineers responsible for its design

AMONG the numerous activities of the Outside Broadcasting Department of the B.B.C., the University Boat-Race from Putney to Mortlake is perhaps unique, in that the interest it arouses extends also to the technical aspects of the relay. The method by which the commentators' remarks are passed to Savoy Hill is now well known. Briefly, the University crews are followed by the launch *Magician*, carrying the commentator, engineers and a short-wave transmitter. At one or more points along the course short-wave receivers are installed which work in conjunction with the transmitter on the launch and relay the commentators' remarks by land-line to Savoy Hill control room.

The event has been broadcast now in this manner for a number of years and the original apparatus has been in use throughout this period. When first constructed, both transmitter and receivers were of course considered satisfactory; they are now, however, in the light of later developments in the art of broadcasting, inefficient and obsolete, and in the interests of reproduction quality and reliability they have both been entirely re-designed. The new transmitter has been built in a small copper and aluminium case, and weighs a little over 100 lbs. Its volume is 3¾ cubic feet as against 28 cubic feet in the old one, which it replaces.

Briefly, it consists of three compartments. On the left is the master oscillator valve, the purpose of which is to produce a high-frequency oscillation of constant frequency and amplitude on the grid of the magnifier valve in the centre compartment. This valve functions as a high-frequency amplifier, and the aerial is coupled to its output circuit. In the right-hand compartment of the transmitter is housed the low-frequency or modulating system. Two stages of resistance coupled L.F. amplification impress the speech voltages upon the grids of the two modulator valves which work in parallel. Modulation is effected by passing the anode currents of the magnifier valve and of the two modulator valves through the primary and secondary of a low-frequency transformer. This system of modulation is, as a matter of interest, the same as that used at Daventry 5XX—*i.e.*, high power transformer modulation.

As will be seen from the photograph (Fig. 2), the number of controls has been reduced to a minimum, there being but two control knobs upon the panel. The one on the left controls the wavelength, while the other is the aerial tuning condenser. This simplicity of control is a very desirable feature on an open boat, where space is limited, and the engineer in charge of the transmitter is working under cramped conditions.

The power for the transmitter is obtained from batteries. The filaments require 6 volts throughout and take 5 ampères altogether. The high-tension voltage under normal conditions is 1,000 volts, and the input power 130 watts. This power is obtained from two rotary converters, working with an input of 12 volts. The power in the aerial is about 25 watts. A straightforward single wire inverted-L aerial is used, 40 feet long and 10 feet high, running the greater length of the boat. The earth connexion is a very simple one, as might be expected on a boat, and for this purpose the metal rudder of the *Magician* is used.

Right in the bow of the boat is secured a box containing two condenser microphones, one of which is a spare (see Fig. 1). This is the first time this type of microphone has been used for the Boat-Race broadcast. The output of the microphone is taken to an amplifier, to which is fitted a volume control by means of which the depth of modulation can be adjusted. There are four stages of L.F. amplification outside the transmitter and two more within, making six in all. Readers who have at any time been troubled with the presence of H.F. in the L.F. portion of their receivers, will realise that the utmost care had to be taken in the design of these six stages which have to work immediately under the transmitting aerial. An unusual point is that the whole apparatus had to be made watertight and vibration proof.

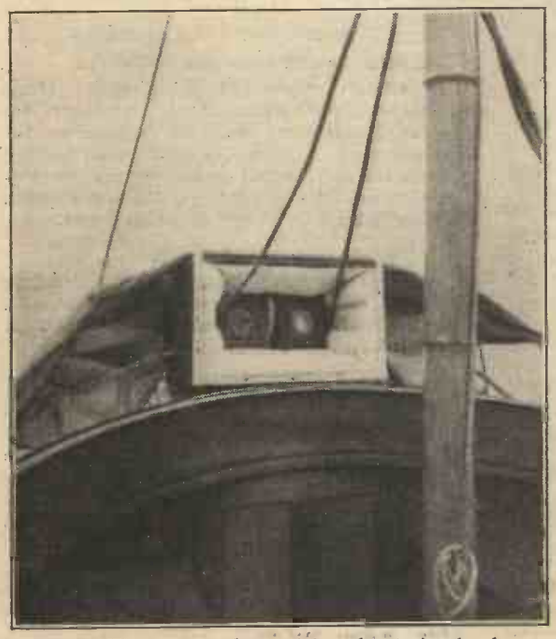


Fig. 1—The two condenser microphones in the bow of the launch

The photograph, Fig. 3, shows the receiving installation in one of the domes on the roof of Harrod's repository. This building is centrally situated and is actually, as the crow flies, about one and a half miles from the starting point and two miles from the finishing post. In previous years, two receiving points have been in use. This year, however, the re-designed receivers are sufficiently sensitive to cover the whole course with ease.

There are two receivers installed, each with its own set of batteries. Change-over switches allow the immediate transference of the aerial and output connexions from one receiver to the other should any fault develop, and a second set of switches allows the output from the receiver to be connected to alternative lines to Savoy Hill, a hand-telephone set being connected to a spare line for liaison purposes.

The receivers each consist of four valves, a screened-grid amplifier, grid-leak detector, intermediate L.F. amplifier and output valve. The aerial, which is approximately a quarter wavelength long, is coupled comparatively loosely to the tuned grid circuit. The screened-grid amplifying valve is one of the new two-volt "variable-mu" type, and hand-operated variable grid-bias is provided by a 25,000 ohm potentiometer connected across the 10-volt grid-bias unit. A second potentiometer of 2,000 ohms is connected between the aerial and the aerial coupling coil, and is linked mechanically to the grid-bias potentiometer. This arrangement provides a convenient means of pre-detector volume control.

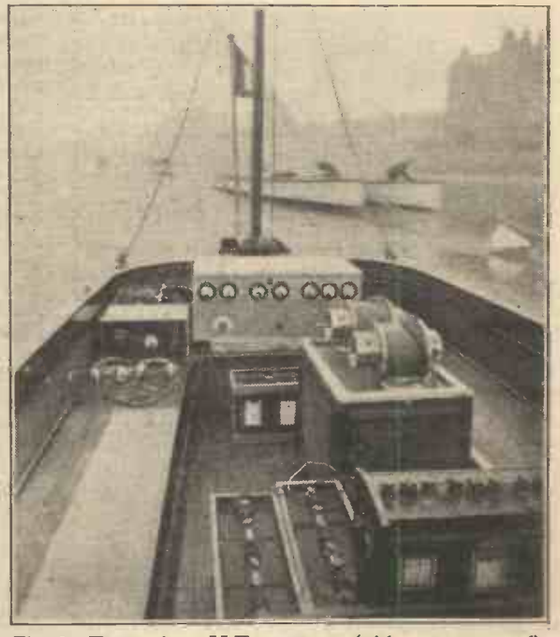


Fig. 2—Transmitter, H.T. generator (with cover removed) and batteries, in the stern

The anode circuit of the screen-grid valve contains a short-wave choke and is capacity coupled to the tuned-grid circuit of the grid-leak detector valve. Reinartz reaction is provided in this circuit. The anode circuit of the detector valve is resistance-capacity coupled through a 250,000-ohm wire-wound 15-stud potentiometer to the grid of the first low-frequency stage, which is in turn transformer-coupled to the output valve. A choke is connected in the anode circuit of this stage, and signals are fed to the Savoy Hill lines *viâ* a condenser and line transformer.

The set is thus provided with a means of volume control over wide limits, both in the high-frequency and the low-frequency portions of the set. This range (estimated at about 60 d.b.) is, however, necessary to compensate for the enormous change of signal strength which occurs between the time when the launch is directly opposite the receiving site, and when it is directly under any of the bridges on the course, which cause very considerable absorption, and also, it is believed, appreciable detuning of the transmitter aerial circuit.

The low-frequency portion of the set provides

considerably more amplification than is required when the detector valve is fully loaded. The potentiometer in the grid circuit of the intermediate valve is therefore provided and is arranged so that the maximum possible attenuation of 28 d.b. just prevents "blasting" in the output stage when the detector valve is giving optimum output. The normal operating condition of the receiver is with the L.F. potentiometer at minimum, reaction at zero and the H.F. volume control adjusted to give the correct input to the detector valve, as measured by the change in current registered by a milliammeter in the anode circuit of this valve.

When the transmitting launch is at the starting point at Putney there is, at the receiving station, sufficient signal strength to provide ample input to the detector valve without the use of reaction. This condition holds over the major part of the course from Putney to about Duke's Meadows, the H.F. volume control being continuously adjusted as the launch approaches and passes the receiving station. Beyond this point a little reaction is first used to maintain the detector input, and finally, for the last mile or so, the low-frequency potentiometer is also brought into use.

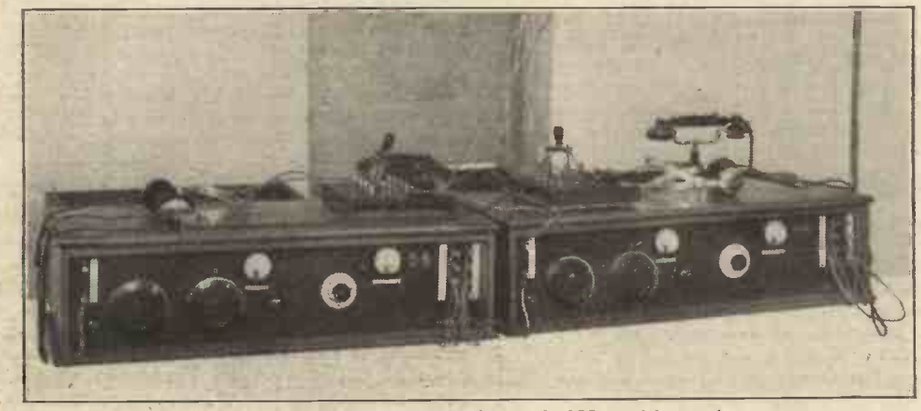


Fig. 3.—Duplicate receivers on the roof of Harrods' repository

There is still, at the finishing post, more than 20 d.b. in hand on the L.F. potentiometer. This extra amplification is reserved for the moments when the launch is passing under the bridges in order that a momentary increase in gain of the receiver may correct for the very considerable decrease in signal strength that occurs at these times.

E. C. D. and C. H. S.

(*Continued from column* 3)

same for a low and a high-power station (fading is, in fact, independent of power), yet the total time during which the signal will be above a certain value is considerably longer, and the time the signal is below audibility considerably shorter. A high-power station may, therefore, seem to have less fading than a low-power one, if judged on an audibility basis. If, however, we have a detector feed meter in our receiver, we shall be left under no misapprehension that high-power stations using waves in the medium broadcast wave-band do not fade!

This article has dealt entirely with stations using the medium broadcast wave-band, and has not considered the conditions on the so-called "long" wave-band (1,000 to 2,000 metres), for on this latter band the direct ray suffers much less attenuation and the indirect ray is much weaker, with the result that very high values of field strength are not produced at a distance as in the medium wave-band. The long-wave stations, therefore, show much less fading and a general absence of very strong signals at a distance which are observed in the medium wave-band.

L. W. H.

Distant Listening—To-day and Yesterday

THESE remarks on the subject of distant listening were prompted by a transmission I chanced to tune in the other evening while I was making a tour of the European ether. Some 70 kilocycles per second above London Regional I found an extremely strong signal—the carrier wave producing at one time a maximum of two-and-a-half times the rectified current given by London Regional for a given H.F. volume control adjustment. As the detector is linear, and as the sensitivity of the receiver does not change very much for this relatively small decrease in wavelength, it is fair to assume that the maximum strength of this signal reached twice that of the steady value of London Regional. This would put the signal strength at about 15 millivolts per metre. This, of course, is not the day value, and at night, when I was listening, the signal from this distant station was fading from this maximum down to almost nothing. It was, however, above 5 millivolts per metre for a considerable portion of the total time I listened to it. The station in question was the new Poste Parisien 60 kilowatt transmitter testing on 914 kc/s.

Now these are not freak conditions, as those who have read Mr. Ashbridge's recent series of articles on a National Broadcasting Service in this journal will realise. A further series of international fading measurements was carried out in January and February of this year, and this series confirmed the previous results very well, but indicated that even higher peak values existed for short periods.* The actual maximum value measured was on a station using a wave of the order of 250 metres and represented a peak field strength of 3.5 millivolts per metre for 1 kilowatt radiated. If we work out what this would be for a station radiating 50 kilowatts, we arrive at a figure of nearly 25 millivolts per metre. Fortunately for European broadcasting, this extremely high value is not often reached, and 50 kilowatt stations on slightly longer waves do not often give peaks of more than 10 millivolts per metre, while their average value is considerably below this.

The foregoing gives some figures which account well for observations which must be within the experience of most listeners to-day —*i.e.*, the interference which is experienced on the local station. It is not our present purpose to deal with this, however, but rather to account for the conditions of reception of a wanted distant station. The above figures do this equally well, of course, for it will be seen that most of the 50-kilowatt stations in Europe, working in the medium wave-band (there are twelve at present), can be relied on to give a very strong signal. There are a further twenty stations having powers of 10 kilowatts and over, from which signals will not be so very much weaker. We must always remember that the field strength varies as the square root of the power, other things being equal. For instance, if a transmitter uses 25 kilowatts and, under certain conditions, gives a field of 2 millivolts per metre, its field will only be reduced to $\frac{2}{\sqrt{2}} = 1.4$ millivolts per metre if its power is halved to 12.5 kilowatts, and will only be increased to $2 \times \sqrt{2} = 2.8$ millivolts per metre if its power is doubled to 50 kilowatts. To put it yet another way, we have to use four times the power to get double the field strength.

From a consideration of all the above, it will be seen that on almost any winter evening there will be some thirty stations on the medium wave-band which may, at different times during the evening, give fields of 2 to 3 millivolts per metre, while some of them may give peaks rising up to 10 and even 15 millivolts per metre. Now a few years ago, 2.5 millivolts per metre was considered as a "C" service area and 10 millivolts per metre as an "A" service area. I do not wish to suggest that a badly-fading signal can be considered as a *service*—far from it—but it does mean that it can be received on simple apparatus.

It is not therefore, surprising that those who have even the simplest of receivers can hear distant stations quite strongly to-day. A simple but efficient crystal receiver, using a good aerial, will bring in quite a number for headphone reception, while a single valve receiver will bring in most of them,† without requiring a highly skilled operator in either case. If we then consider the greater sensitivity of present-day receivers, and the very much greater facility of control and operation, due in no small degree to developments in valve design, when compared with receivers of a few years ago, we can readily and easily account for the present ease and popularity of distant listening.

If we contrast this with the conditions of only four years ago, we find that then the majority of European broadcasting stations used a power of only one or two kilowatts. Although we have shown above that increase of power does not give a corresponding linear increase of field strength, yet a change from 1 to 50 kilowatts does give a sevenfold increase, which is, of course, considerable. In addition, the modern high-power stations are generally situated outside towns and have far more efficient aerials than their low-powered predecessors, with the result that their radiated power may represent an even greater increase in field strength than the calculated value.

It is assumed that conditions in the Kennelly-Heaviside Layer governing the reflection of waves in the medium broadcast band were the same four years ago as they are today. The absence, until recently, of a large number of measurements of the indirect ray produced by broadcasting stations makes it impossible to say with certainty whether this assumption is entirely justified. There is fairly definite evidence, in fact, that, as far as short-wave transmission is concerned, there does appear to be a cycle of change in the reflecting layers (recent investigations indicate that there are two layers) following changes of solar activity. It may be that, at the present time, we are at or near the maximum of reflected ray, and that in some few years time there will again be less reflected ray for a given power radiated.

There is a further point to be borne in mind in regard to apparent fading, for although the actual period and depth of fading will be the

(*Continued at foot of first column*)

* Refer to Fig. 5 on page 352 of *World-Radio*, February 26.
† See "Economical Distant Listening," *World-Radio*, October 30, 1931, page 684.

The Elements of Wireless

(PART 7)

By RALPH STRANGER and E. REDPATH

BATTERIES (*Continued*)

The practical utility of primary batteries of any kind is limited by the fact that they can be used only for purposes where a relatively small current supply is required. As a source of high-tension supply for a small valve set, say a two or three-valve receiver, where the current drawn from the battery will be of the order of six to eight milli-ampères (a milli-ampère is one thousandth of an ampère), a multi-cell dry battery is very satisfactory, although somewhat expensive. In the case of four or five-valve portable receivers the drain upon the battery is even greater, and consequently the cost is further increased, but, of course, for *portable* receivers there is no alternative. For the supply of current to heat the valve filaments, or for any other purpose where a relatively heavy and constant current is required, primary batteries are quite unsuitable, and another type of battery is universally employed.

Secondary Batteries

If two pieces of sheet lead are immersed in a sulphuric acid electrolyte, and connected for a time to a source of steady direct-current supply—the positive wire to one plate and the negative to the other—a chemical change takes place in the lead, and the plate connected to the positive wire acquires a brownish colour. Upon removing the supply wires and connecting the lead-plate cell to a small electric lamp bulb, the current—which has apparently been stored in the cell—will be released and will cause the lamp filament to glow.

The simple cell just described illustrates the essential principle and action of what are termed *secondary batteries*. It will be seen that the name is appropriate, as current can be obtained from such a battery only when it has first been charged. Other names given to these batteries are—storage batteries and accumulators, and the arrangement of a modern cell is illustrated in Fig. 21. The plates no longer consist of sheets of lead, but are specially cast lead grids filled with "paste," the positive and negative plates being interleaved, but separated, in the electrolyte of sulphuric acid. All the plates of each polarity (positive or negative) are joined by a lead "bridge piece," from which a lead "stem" rises through the cell casing to carry the appropriate terminal, while a "vent" is provided to permit the escape of hydrogen gas which is evolved during the process of charging.

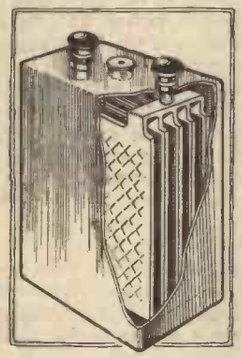


Fig. 21

Any "lead-plate" accumulator cell, *of whatever size*, will yield an E.M.F. of 2 volts, when fully charged. When just freshly charged the voltage per cell is a little more than 2 volts (about 2.2), and the cell should be re-charged, with the least possible delay, when the voltage, per cell, falls to 1.8. The *capacity* of an accumulator cell depends upon the area of active plate surface in the electrolyte, and is expressed as so many *ampère-hours*. This means that a cell rated as being of, say, "20 ampère-hour capacity" is, theoretically, capable of delivering current at the rate of 1 ampère for 20 hours; 0.1 ampère for 200 hours; or 5 ampères for 4 hours. Practically, however, there is a limit to the rate at which current may be fed into or taken from an accumulator, and the respective *charge* and *discharge rates*—almost invariably indicated on the maker's label on the side of each cell—should be adhered to strictly.

Cells in Series

The E.M.F. available from a single primary cell (*e.g.*, a dry cell) is 1.5 volts, and in order to obtain higher voltages a number of such cells must be connected together in such a way that their separate voltages are added together. As already mentioned, the high-tension dry-cell battery in every-day use is made on this plan, the 108-volt battery consisting of seventy-two cells and the 120-volt battery of eighty cells.

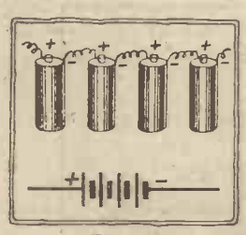


Fig. 22

Cells connected in this way are said to be connected *in series*, and a simple rule is—*to add the voltages of a number of cells, connect in series; i.e., the positive terminal of one cell to the negative terminal of the next*. Fig. 22 illustrates the method as applied to four typical dry cells, the upper drawing showing the arrangement pictorially, and the lower drawing showing how the battery of four cells would be indicated in a theoretical circuit diagram.

Cells in Parallel

As the capacity of any individual cell depends upon the amount of active material in the cell—in other words upon its size—it will be seen that by connecting two similar cells so that their respective positive and negative elements operate together, the capacity will, in effect be doubled. This method is of considerable use in the case of accumulators, where it is desired to obtain either (*a*) a higher rate of discharge than is advisable from a single cell, or (*b*) a longer continuous discharge without the necessity of changing batteries. The total voltage will remain that of a single cell, and only cells of equal voltage should be so connected.

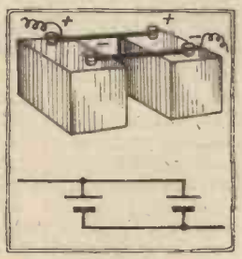


Fig. 23

Cells connected in this manner are said to be connected *in parallel*, and again a simple rule to remember is—*to obtain increased capacity connect cells of equal voltage in parallel—i.e., positive to positive and negative to negative*. The method, as applied to two accumulator cells, is illustrated, both pictorially and diagrammatically, in Fig. 23.

MAGNETISM (*Continued*)

Accompanying last week's article were three reproductions of magnetic fields, and, as the actual making of such records is very informative, and the materials required are quite inexpensive, the method employed will be described for the benefit of those who care to follow the author's recommendation to "try the experiment."

The materials required are: two or three small magnets (bar and horseshoe), a small supply of paraffin wax (obtainable from any chemist), some fine iron filings, a few sheets of white paper (preferably typewriting paper), and a shallow tray, such as the lid of a biscuit tin, in which to melt the wax over a very small gas jet. When the wax is completely melted, lay each sheet of paper, in turn, on the surface of the wax, so that the paper becomes thinly coated on one side, remove and allow to dry.

Having arranged the magnets, lay one paper over them, waxed side uppermost, and sprinkle over it the iron filings, tapping the edge of the paper lightly with a pencil, if necessary, until the "lines of force" are clearly indicated. Pass a lighted taper or match close to the filings so as to cause the wax to melt slightly, and, upon allowing it to cool and set again, the filings will be held securely in position. For the purpose of reproduction, photographic prints were made from the wax negatives.

Magnetic Induction

It is possible to magnetise a piece of iron without actual contact by merely placing a magnet near to it. The reason for this phenomenon is the attraction of unlike molecular poles *at a distance*. In Fig. 24 is shown a permanent magnet placed near to a piece of iron.

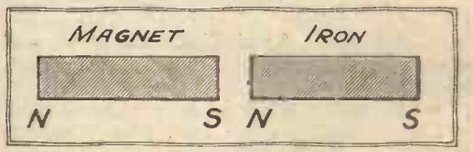


Fig. 24

As has already been explained, the molecules constituting the magnet are arranged in an orderly manner so that all the molecular south poles are pointing one way, and the molecular north poles are pointing the opposite way. In the iron, before it is magnetised, the molecules are pointing in all directions.

As soon as the end of the permanent magnet marked S is brought near enough, the molecular south poles of the magnet will attract the molecular north poles of the iron, swinging them into an orderly formation. In this manner the molecular magnets in the iron will arrange themselves in a similar way to those in the magnet, *but their north poles will face the south pole of the magnet*. Similarly, when the north pole of the permanent magnet is brought near to the iron it will attract the south poles of the iron molecules, so that a south pole of the iron will face the north pole of the magnet.

Thus, *either pole of a permanent magnet will induce at a distance an opposite pole in the near end of a piece of iron.*

Such magnetisation at a distance is called *magnetic induction*. The iron will remain magnetised as long as it is in close proximity to the magnet, but as soon as the latter is removed the iron will lose its magnetism.

Electrostatic Induction

A similar phenomenon of induction (*i.e.*, action at a distance) can be produced in the case of electrified bodies. If an electrified body, carrying a positive charge (a predominance of protons) is placed near a neutral conducting

body, as shown in Fig. 25, some of the electrons in the surface atoms of the body will be attracted to the end adjacent to the charged body. A kind of *electronic tide* will take place.

As the electrons of the neutral body swarm towards the end which is near to the attracting body (the attraction is exercised by the unbalanced protons), the opposite end becomes poor in electrons and shows, therefore, a predominance of protons. In this manner the near end of the neutral body becomes charged negatively and the opposite end is charged positively. *These two charges are of equal magnitudes, as what one end loses the other end*

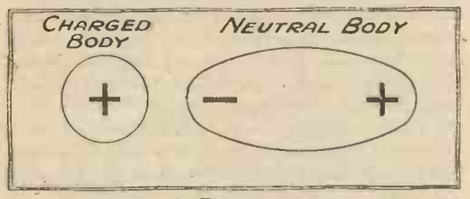


Fig. 25

gains. As soon as the *charged* body is removed the electrons, no longer attracted, will swing back to their own atoms and the body will become neutral once more.

A negatively-charged body brought near to a neutral body will produce an electronic tide in the opposite direction. In this case the excess electrons on the charged body will repel the electrons in the surface atoms of the neutral body to the far end, leaving the near end with a predominance of protons. Thus, *a charged body will induce at a distance an opposite charge in the adjacent end of a neutral body.*

It is interesting to note the behaviour of a neutral body connected to earth when subjected to an electronic tide. In the case shown in Fig. 25, if the end of the neutral body carrying, *temporarily*, a positive charge is connected to earth, electrons will flow from earth to that end wiping out the deficit of electrons. The electrons at the other end cannot move, as they are being held in their places by the attractive forces of the protons of the charged body. If the charged body is now removed, while the "neutral" body is still connected to earth, the electrons which have arrived from earth will go back and the body will be neutral.

Similarly, in the opposite case, if the end which is *temporarily* charged negatively is connected to earth, electrons will flow from it to earth. No electrons can go to the positive end owing to the repulsion of the electrons of the charged body. As soon as the charged body is removed electrons which went to earth will return, making the body neutral once more.

On the other hand, if the earth connection is removed *before* the charged body is taken away, the body which was previously neutral will be left with an electric charge.

The above form of induction is called *electrostatic induction*, because there is no migration of electrons around a circuit, but merely a swinging to and fro as the charged body is brought near and is taken away. The electrons remain static (stationary) in relation to the body, provided the latter is isolated in space.

There is still another form of induction, called *electro-magnetic induction*, which we shall consider later.

(To be continued)

Correspondence

Reception of WBZ

To the Editor of WORLD-RADIO

SIR,—I have noticed in your columns lately that several listeners have been hearing WBZ, Springfield, at very good strength this winter. This was not the case last winter, although many U.S.A. stations were received very well. Since then, a new transmitter has been installed at Millis, Mass., which has up-to-date 100 per cent. modulation.

WBZ belongs to the Blue Network of the National Broadcasting Company and broadcasts daily from 12.30 p.m.—4.30 a.m., G.M.T. on a wavelength of 302.8 metres. With WBZ are associated two other stations: WBZA, Boston (302.8 m.; 0.5 kW.) and W1XAZ, Springfield (31.35 m.; 10 kW.).

Yours faithfully,

Dublin. R. M.

Tone Correction

To the Editor of WORLD-RADIO

SIR,—In your issue of 12th February there is an article on "Tone Correction in Broadcast Receivers." The leading sentence of this article makes the statement that Tone Correction is not new, giving an illustration that the B.B.C. have employed it at the transmitter. The article then proceeds to describe how tone correction can be applied to the case of a receiver where high selectivity is employed. In view of the importance of this new method of constructing wireless receivers, your readers should not be allowed to form the impression that this field is free from patent protection.

Yours faithfully,

J. ROBINSON.

Mill Hill, N.W.7. March 11, 1932.

"ELEMENTS OF WIRELESS"—PROGRESS COMPETITION NO. 1.

The examination of the Test-Papers has been completed just as we go to press, and we have pleasure in announcing the prize-winners as follows: **1st Prize (Four Guineas)**—Mr. E. C. LAY, 25, Great Cambridge Road, Downhills, London, N.17. **2nd Prize (Two Guineas)**—Mr. E. F. HAYBURN, R.A. Mess, Lille Barracks, Aldershot.

A Special Prize (Accumulator), offered by the Ever-Ready Company (Gt. Britain), Ltd., has been awarded to Mr. N. C. HINDLEY, 110, Astley Street, Tyldesley, near Manchester.

* * *

In next week's issue the authors will publish their comments upon the Test-Papers.

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Telephone (Clissold 5725)

Tracing Faults in Portable Receivers

(*Continued from page 524, March 18*)

CRACKLING sounds are sometimes produced by a faulty contact between the cells of dry batteries; as these are invariably covered with bitumen or some such compound, it is not easy to find such a fault, and the substitution of another battery is the most practical remedy. If, however, the faulty cells can be located by noting a variation in the current output of a particular group of cells, a makeshift remedy can be effected by "shorting" these cells with a piece of wire.

A form of intermittent contact which is peculiar to some types of portable sets is that caused by a partial break in the leads between the set and the lid; this applies mainly to suitcase sets, but there are a few sets of the upright type in which the frame aerial is contained in the door. The leads to the latter are usually quite easily inspected, but in the suitcase type of set they are often concealed in some way so as to preserve a tidy exterior appearance. If trouble from this source is suspected, the lid should be moved up and down while the set is switched on.

Microphonic Valves

This is a form of trouble which occasionally develops after a receiver has been in use for some time. It is more prone to occur in the detector valve than in a high-frequency or low-frequency valve, though it sometimes occurs in the latter. In many of the latest types of portable receivers all the valves are of a different type, and this precludes the possibility of changing them about in an attempt to find a non-microphonic valve to use in the detector position. If, however, it happens that the detector and first low-frequency valves are of the same type it may be found that interchanging these two will cure the trouble. If not, the only remedy is usually to replace the faulty valve with a new one.

When testing to find out whether a low-frequency howl is being produced through a valve being microphonic, it is often helpful to place the hand round the suspected valve, holding it quite firmly. As the microphonic effect is produced by vibration of the electrodes, holding the valve in this way sometimes steadies it sufficiently to prevent the commencement of a howl. Occasionally it is possible to prevent or reduce microphonic trouble by enclosing the valve in a thick layer of cotton wool, but as a rule it will be found better to substitute the valve with a new one. If, however, the emission of the discarded valve is still normal, it is possible that it could be used satisfactorily in a different set.

Coincident Faults

It is not always safe to assume, when a fault has been located in a receiver, that that is the sole cause of the receiver's failure to work, or the trouble which is being experienced. With wireless sets, as with other things, coincidence often plays a part in making things more difficult, and it often happens that two faults may occur at the same time, or that a fault may occur coincident with some other adjustment having been made to the receiver.

As an example of this, an experience which recently befell a friend of the writer may be of interest. This listener had been using a well-known make of portable set in which the grid-bias battery is incorporated in the high-tension battery, a plug inserted at nine volts from the negative end serving both as a high-tension negative and grid-bias positive. Being unable to obtain a battery of the same type as that supplied with the receiver, and having a slight knowledge of wireless, he decided to use a standard high-tension battery and a separate grid-bias battery. Having connected up the two batteries, perhaps somewhat doubtfully, and improvised a connection to the positive end of the grid-bias battery, he switched on the receiver, which resulted in a noticeable flash from "somewhere inside."

Being convinced that he had made some mistake and thereby blown a set of valves, he left the set severely alone and asked the writer's assistance. A brief investigation, however, showed that the connexion to the batteries had been made quite correctly, and that the trouble was due to the output valve having decided at that moment to burn out, due apparently to a short circuit having taken place inside the valve. The substitution of a new valve of the same type restored the set to its previous working order.

F. W. E.

Obituary

D. W. Dye, D.Sc., F.C.G.I., F.R.S.

BRITISH radio research has suffered a great loss by the death of Dr. D. W. Dye, F.C.G.I., F.R.S., which occurred on February 18 after a very short attack of pneumonia following influenza. Dr. Dye, who was only forty-four years of age, was educated at Portsmouth and at London University, of which he held the Doctor of Science degree. In 1910 he was appointed a member of the staff of the Electrical Standards and Measurements Division of the National Physical Laboratory, Teddington, and he became head of this division in 1919. In this position, all the primary electrical standards of electromotive force, current, resistance, capacity and inductance held by this country came under his care, and he established a reputation for highly accurate work carried out in the many classes of measurements involving the use and maintenance of these standards.

During the past ten years or so, Dr. Dye's keenest interests lay in the direction of precision measurements at radio frequencies, which measurements form the basis of the technique of radio communication. In 1925 he had already adopted and developed the tuning-fork controlled multi-vibrator system as a primary standard of radio frequency. At about this time also he began to study the behaviour of the quartz crystal as a piezo-electric resonator and oscillator. Concurrently the valve-driven tuning fork was developed and arranged to drive a phonic wheel, which in turn recorded on a chronographic drum simultaneously with the "seconds" dots from the standard Shortt clock. A direct link was thus established between the radio frequency spectrum and the Laboratory standard of time.

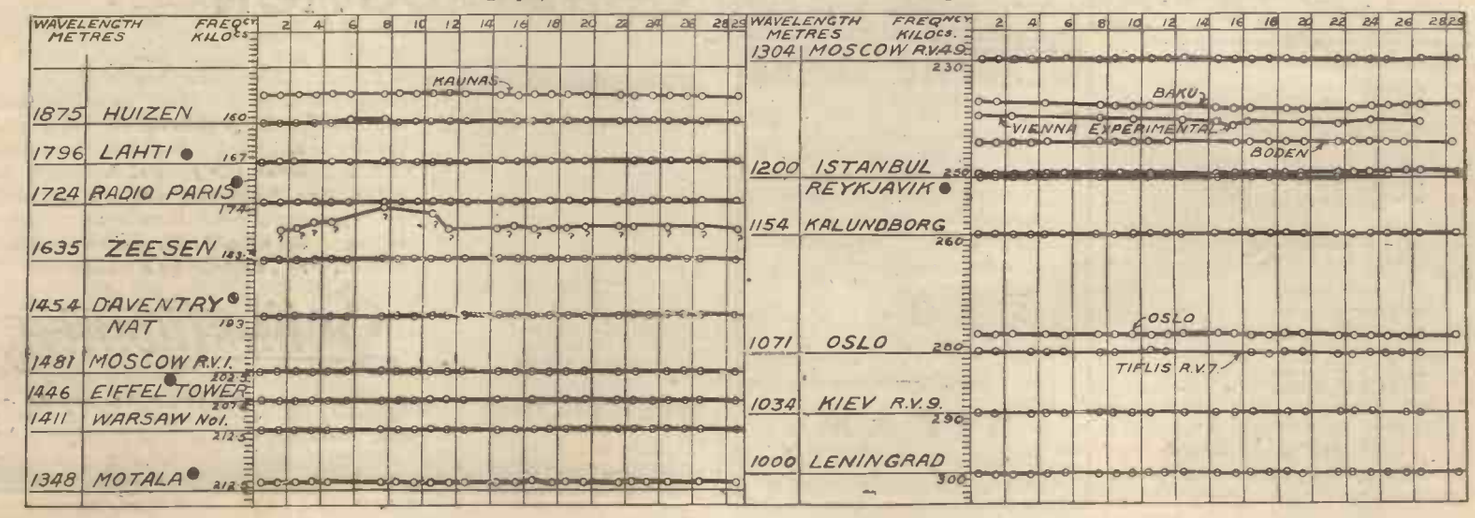
In his latest work in the direction of frequency measurement, Dye had set up two tuning forks and a ring quartz oscillator, all continuously maintained under carefully selected conditions of temperature and pressure control, and it was estimated that both tuning fork and quartz oscillator standards possess a uniformity in operation of the order of one part in a hundred millions. It is on this very secure basis that Dye has left the national frequency standards of this country.

Dr. Dye was a member of the Standards Committee of the Radio Research Board, and was also Honorary Secretary of the British National Committee of the Union Radio-Scientifique Internationale.

Frequencies of Long-Wave European Broadcasting Stations

February Measurements by the Brussels Laboratory of the Technical Committee of the U.I.R.

The Letter T indicates Telegraphy transmissions. Stations marked ● are provided with U.I.R. wave-meter.



Ultra Short-Wave Communication

By R. L. SMITH-ROSE, D.Sc., Ph.D., A.M.I.E.E.

3.—Experimental Receivers

THERE is nothing radically new in the design of receiving apparatus for use on very short wavelengths, the main difference from receivers suitable for longer wavelengths being a general reduction in inductance and capacities. Stray capacities become very important at frequencies of the order of 50 million cycles per second, and very careful layout of the components is necessary. Before describing in detail any specific receiver, it will be useful to review the various types of receiver which have been used with success on longer wavelengths.

The simplest type of receiver which has found widespread use on wavelengths below 100 metres is that employing a single-valve detector with variable capacity retroaction. For the reception of modulated continuous waves this retroaction can be set critically at a point just below that at which the valve oscillates, while at a point just above this the receiver is in a very sensitive condition for the reception of continuous waves. Any valve circuit, therefore, which will oscillate freely at the working frequency and can be controlled by suitable adjustment of the retroaction may be made to serve for reception purposes.

Where additional sensitivity is required, it is usual at frequencies within the medium and long-wave bands to employ one or more stages of direct radio-frequency amplification and the recent rapid development of the screened-grid valve has considerably aided this object in improving the overall sensitivity of the receivers. As the working radio-frequency is increased, however, it becomes increasingly difficult to obtain any appreciable amplification, and at the present time it appears that the limiting frequency at which such direct radio-frequency amplification is worth while, is found to be about 20 million cycles per second (15 metres).

In receivers using one or more stages of amplification at these high frequencies, it is usually found that any amplification obtained is got at the expense of the retroaction setting of the detector, and that if the high-frequency stages are removed this retroaction can be increased so that there is little overall loss in sensitivity. To avoid this decrease in available retroaction when using high-frequency stages, certain investigators have developed the super-regenerative type of circuit. In this arrangement it is possible to use more retroaction as the valve is prevented from dropping into oscillation by the quenching action of a supersonic oscillation at a frequency lower than that of the signals to be received.

To meet the difficulty of radio-frequency amplification at very high frequencies, the principle of the supersonic heterodyne receiver may be employed with advantage, and a description will be given later of a simple receiver of this type which will appeal to broadcast listeners. The advantage which this type of receiver possesses lies in the comparative ease with which it is possible to obtain considerable voltage amplification at an intermediate frequency of the order of 100,000 to one million cycles per second (wavelength 3,000-300 metres). In order to use such an intermediate frequency amplifier in a short-wave receiver, it is necessary merely to precede it by a frequency changing unit, which generates oscillations of such a frequency as to heterodyne those of the incoming signals. By the substitution of different frequency-changing units it would appear possible to extend the range of such a receiver down to the shortest wavelengths at which receiving valves may be made to oscillate, which, as has been previously stated, is of the order of 1 metre.

With this general review of the types of receiver which may be available for ultra short-wave working, a description will now be given of two simple arrangements of experimental receivers which have given good results on wavelengths between 4 and 10 metres.

A Simple Two-Valve Receiver

The circuit diagram given in Fig. 1 illustrates the arrangement of a simple receiver employing one detector stage with capacity retroaction, followed by one stage of transformer-coupled audio-frequency amplification. In this arrangement the tuning inductance is centre-tapped, as at this point there is no alternating potential, and by connecting the centre of the coil through a suitable battery to the negative end of the filament, any required bias may be applied to the grid of the detector valve without interfering with any alternating electro-motive forces in the tuned circuit. An open aerial can be coupled to one end of the coil by a variable condenser having a capacity of about 50 micro-microfarads. If a definite earth connexion is employed, it is preferable that this should be made to the centre of the coil. If, on the other hand, an insulated counterpoise system is used, this may be connected to the other end of the coil by a variable condenser in the same manner as the aerial.

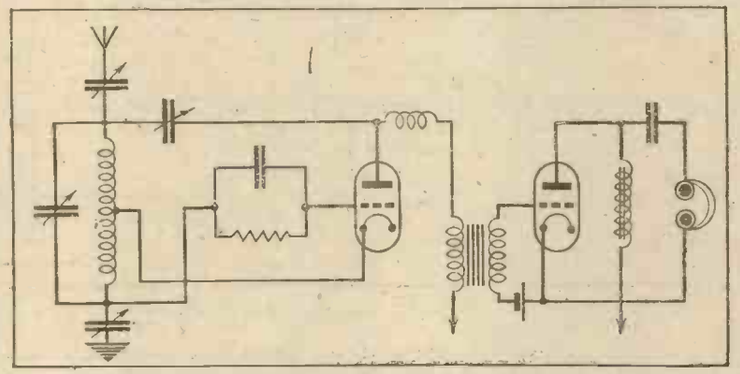


Fig. 1.—Receiving circuit employing aerial and counterpoise earth

The important point to observe is that in this circuit the two ends of the inductance coil are at high alternating potentials, and the aerial and counterpoise connected thereto should be arranged to provide potential variations at these points. It is therefore necessary to ensure that the length of either aerial or counterpoise is not an odd multiple of a quarter of the wavelength, since this would provide a potential node at the connexion to the receiver. The condition for optimum reception with this type of circuit involves the adjustment of the length of the aerial and all the controls of aerial coupling, retroaction, and tuning. The correct adjustment of aerial coupling is particularly important since, if this is too great the radiation resistance of the aerial, which at these short wavelengths, is of the order of 50-100 ohms, will prevent the detector valve from oscillating, while if it is too small, a loss in sensitivity will result.

For an experimental investigation of the propagation of ultra short-waves it was considered desirable to dispense with an open aerial. The receiving antenna thus took the form of a closed loop of from 5in. to 12in. in diameter, which was mounted directly on a screened box containing all the receiving apparatus. A view of this receiver, with one side of the box removed to show the interior arrangement of the components, is given in Fig. 2. With the side of this box in position, it will be appreciated that everything except the pick-up loop is efficiently screened, a great advantage for many signal intensity and direction-finding measurements.

In order to avoid the central tapping at the top of the single turn loop, the circuit arrangement of this receiver was slightly modified, as shown in the diagram (Fig. 3). This arrangement is sensibly similar to that shown in Fig. 1, employing one detector stage and one audio-frequency amplifying stage, but the connexion to the negative end of the filament is taken from the centre point of the two tuning condensers which are connected in series across the receiving loop. In later models of this receiver this connexion has been found to be unnecessary. In order to make the whole receiver as symmetrical as possible about the central axis of the loop, and also to shorten the length of the wiring to the first stage, the apparatus is arranged in three tiers, as indicated in the photograph.

For wave-lengths between 5 and 10 metres a condenser having a maximum capacity of from 25 to 50 micro-microfarads is suitable for the main tuning condenser. This condenser should have reasonably small linear dimensions, as at this short wavelength the inductance of the plates themselves becomes important. Another advantage of such a small condenser is that there is usually less stray field to create losses in the

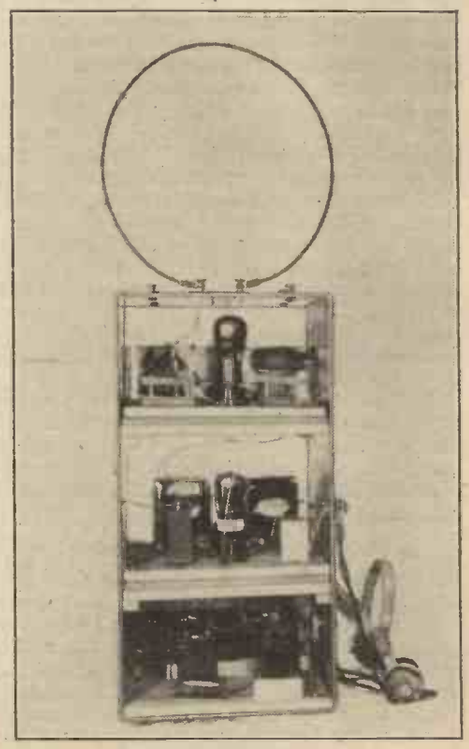


Fig. 2.—Loop-aerial receiver

insulators supporting the plates. In a receiver it is convenient to employ for this purpose one of the micro type of condensers which has the two sets of fixed plates insulated from each other. Used in this way the component really forms two small condensers in series, and in a typical sample the capacity range was from 2 to 24 micro-microfarads. A condenser of similar design and capacity is suitable for retroaction purposes and for coupling the aerial and counterpoise to the coil. The grid condenser should be of fairly large capacity in order to stabilise the oscillations: a fixed condenser having a capacity of about 1,000 micro-microfarads will be found suitable. The grid-leak should have low self-capacity and have a resistance between 0.5 and 2 megohms, according to the valve used. Small diameter wire has an appreciable inductance, and so to avoid unnecessary reactance in the leads at very high frequencies all wiring should be made with reasonably thick wire. Such wire has the additional advantage of rigidity—an essential feature at these high frequencies. The remainder of the components used in the set are of the normal commercial type.

As will be seen from the photograph, the loop is held rigidly to the top of the box by its terminals, to the underside of which is connected the tuning condenser. The controls for this and the retroaction condensers are taken through the back of the box, and sockets are provided for interchangeable grid-leaks and choke coils. A single audio-frequency amplifying stage is mounted on the middle platform, while necessary batteries are placed at the bottom of the box. The output terminals for telephones are connected as a shunt across an audio-frequency choke in the anode circuit of the second valve, and by this means the telephone leads, and hence the observer, are maintained at the screen potential, thus avoiding certain difficulties due to capacity changes. With this type of receiver a series of interchangeable single-turn loops constructed of ⅛in. diameter copper or aluminium tubing are employed. With a single turn loop of this type, 5in. diameter, the tuning range on the set is from 4.8 to 6.9 metres, with variable condensers of the type described above having a range of capacity from 2 to 24 micro-microfarads. With a 12in. diameter loop the wavelength range becomes 6.7 to 10.8 metres.

Readers who are interested in carrying out experiments on this band of wavelengths will find that this type of receiver is very simple to construct, and will be found satisfactory in operation for the carrying out of a number of interesting experiments.

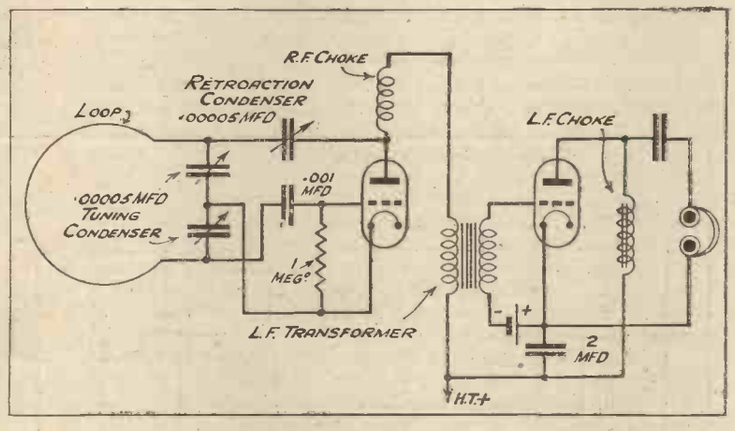


Fig. 3.—Circuit of two-stage loop receiver

A Simple Super-Heterodyne Receiver

In considering the application of the supersonic heterodyne receiver with its accompanying advantages, as outlined above, an arrangement which will appeal to the reader, and which has been found to give satisfactory operation in practice, is to utilise a frequency corresponding to the wavelength band 300–500 metres as the intermediate frequency for radio-frequency amplification. Under such conditions it is evident that an ordinary broadcast receiver may be employed as the intermediate frequency amplifier followed by the necessary audio-frequency amplification to give an adequate volume output at speech frequencies. To put this idea into practice it is thus merely necessary to construct a frequency-changing unit which reduces the oscillation frequency from that corresponding to the ultra-short wavelength to that of the medium broadcasting band.

Such a frequency-changing unit can be made from the first stage of the receiver described in the previous section by a suitable modification in the anode circuit, which is made clear by the circuit diagram, Fig. 4. This valve is made to act as a combined oscillator and detector for the purpose of changing the ultra-short-wave frequency to an intermediate frequency corresponding to that of the broadcasting receiver to be employed. In this arrangement a tuned loop aerial is employed as formerly with the same connections for the input circuit to the grid of the first valve.

The anode circuit of this valve contains in addition to the ultra-short wavelength choke previously used, a radio-frequency transformer of the type commonly fitted in broadcasting receivers. This transformer may have either its primary or secondary tuned, and it should have a wavelength range of from 300–600 metres. The secondary terminals of this transformer are connected directly to the grid and grid-bias negative of the first valve of the broadcast receiver. The transformer replaces, in fact, the aerial or input transformer normally employed with the receiver. In many cases this input transformer may itself be utilised and suitably connected in the anode circuit of the frequency-changing stage which precedes the main part of the receiver.

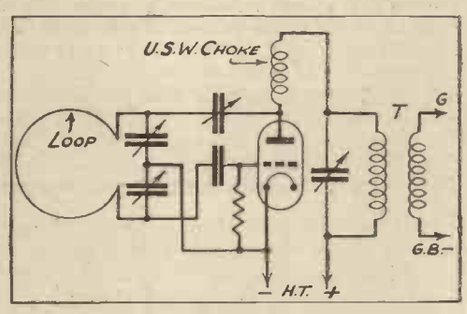


Fig. 4.—Circuit of ultra short-wave "adaptor"

T is a medium-wave coupling transformer and G and GB—are connected to terminals of the broadcast receiver, with usual aerial coil removed.

In operation this additional valve is made to oscillate at a frequency corresponding approximately to the ultra-short wavelength being received by suitable adjustment of its tuning and retroaction condensers. The transformer in the anode circuit with the remainder of the broadcast receiver is then tuned to a suitable wavelength, which is free from direct pick-up of any broadcast signals. If now the tuning of the first or frequency-changing stage is carefully adjusted, a modulated transmission on this wavelength will be received. This is accomplished by ensuring that the frequency at which this valve is oscillating differs from the incoming carrier frequency by an amount equal to the frequency corresponding to the tuning adjustments of the broadcasting receiver. In this condition the audio-frequency modulation will be carried through the broadcasting or intermediate-frequency receiver, and after a second rectification at the detector normally employed in this receiver, the modulation will be reproduced after amplification in the audio-frequency stages of the receiver. In the usual manner for supersonic heterodyne reception there will, of course, be two adjustments of the ultra short-wave condenser giving reception of signals, and the more suitable of these can be selected as desired.

In constructing a receiver on these lines the reader will be able to find much interest in the embodiment of his own ideas. There is no particular difficulty involved except to ensure that the radio-frequency choke in the anode circuit is efficient in preventing the ultra short-wave frequency carrying through from the input side of this stage. It may further be found desirable to screen the transformer in the anode circuit in order to avoid the direct pick-up of broadcast signals on their normal wavelength.

In conclusion, it may be stated that for short distance working the simple two-stage receiver described and illustrated in Fig. 1 has given satisfactory results for telephone reception at distances of a few miles from a low-power transmitter. A second audio-frequency or power stage could be added if loud-speaker reception is desired. Actual measurements carried out on two supersonic heterodyne receivers have shown that this type can easily be made about a thousand times as sensitive as the simple two-valve set, and it is probable that the arrangement shown in Fig. 4 will ultimately be found more suitable for the general loud-speaker reception of broadcasting on wavelengths between 5 and 10 metres.

(To be continued)

Correspondence

Value of Short-Wave Relays

To the Editor of WORLD-RADIO

SIR,—That power is pleasure cannot be gainsaid when it is a question of Chelmsford being relayed by his big brother at Schenectady. Using the Short-Wave Adaptor described in your issue of November 7, 1930—in conjunction with an all-mains 2 S-G detector and power pentode—Sir Oliver Lodge's talk on "Science and Civilization" was picked up on 30 metres at 9.30 p.m. (local time) last night at full loud speaker strength and very little fading. Chelmsford failed even to emit a whisper during this transmission, although the National programme was being put on the ether by him at that moment. Prior to last night's reception & the powerful relay in question, Bernard Shaw's talk on Russia some time ago, President Hindenburg's New Year's Eve appeal in connection with Germany's moratorium, and other outstanding events have been picked up from the same source. The success of these relays is doubtless due to Schenectady's power and to the relay being made there in full daylight.

British listeners abroad fully appreciate the better programme conditions from Chelmsford now obtaining, and doubtless when the B.B.C.'s present scheme of increased power and longer hours of transmission on several wavelengths become effective during the current year, all causes for complaint will have been ruled out. Incidentally, I would like to mention that the success of the adaptor in question is due to the type of tuning condenser used in the detector circuit. This condenser is of the double type, employing both tuner and tank (.0001 mfd), which is most effective in preventing the spread of frequencies.

Yours truly,
F. DE SWART.

Izmir, Turkey-in-Asia. Feb. 11, 1932.

Short-Wave Reports

To the Editor of WORLD-RADIO

SIR,—I should like to report the following :—

UOR2, Vienna, on Feb. 18, 23, and 25, asking for reports and stating that they were broadcasting every Tuesday and Thursday, from 1.30 p.m. G.M.T.

W3XAL, Bound Brook, on the 18th in his closing announcement, said that on and after Feb. 21 he would broadcast daily from 5 p.m. to 1 a.m. E.S.T., *i.e.*, 10 p.m. to 6 a.m. (including Sundays). I have subsequently logged this station on its new schedule.

CT1AA, Lisbon, on the 19th and the 26th—on the latter date he said that he was using a new aerial system, and asked for reports. Incidentally, he mentioned that he had been testing on 25.25, this probably answering G. G. (Bournemouth's) query, week ending Feb. 19.

During this period I have also logged—

Feb. 21: 07.45—08.00 VK2 ME, Sydney, 31.28 tel., R4/FS/N station call and Kookaburra call-sign. 16.00—16.30 VK2ME, Sydney, 31.28 tel. R2/3—swamped by Zeesen.

Feb. 28: 07.30—08.00 VK2ME, Sydney, 31.28 tel., R3/4 station call and Kookaburra call-sign.

Feb. 23: 14.00—15.40 PLE, Bandoeng, 31.86 L.S./R6, N station call. 18.30 W2XAD, Schenectady, 19.56 tel., R5/6, FFR/N. Faded out completely at 19.00.

The programme from Bandoeng on Feb. 23 was cut off at 14.45 in order to get in communication with New York, listeners being told to tune to the 15.93 wavelength for the remainder of the programme. Then followed telephony with America and Amsterdam until 15.40. I was unable to find the 15.93 m. transmission, but gather from remarks made on different occasions that this wavelength is still used simultaneously with the 31.86 m. one.

I have also to report a regular relay of Hilversum on about 49.5 m. I notice it has been reported on 50.1 m., but have personally always found it just below Moscow's 50 m. transmitter.

I have also just heard (17.00—18.00 to-day) a ceremony from the Vatican (50.26 m.) in which the Pope himself spoke for about twenty minutes—a resumé of his speech was afterwards given in English for the benefit of the National Broadcasting Co. which was, I understand, relaying the programme.

All these stations were heard on an all-wave o–v–pentode set with outside aerial.

On the medium wave I have to report WIOD, Miami Beach, Florida, on 231 m. from 2.30—4.30 to-day at R.3 on 'phones on a SG–Det.–Power set. I doubt, however, if his power can be as low as stated by you in your issue of Feb. 12, as he was the only American to be heard here at that time.

Yours faithfully,

Withern. H. C.

* * *

To the Editor of WORLD-RADIO

SIR,—I should like to mention the rather remarkable change in short-wave conditions which occurred on Feb. 27. For the past few weeks practically nothing has been heard here of the American stations. Lately a number of American transmitters have come in well, and the Canadian station VE9DR, which I have not heard before. It would be interesting to know if other listeners noticed the change in reception conditions. Our own G5SW was heard for the first time in several weeks.

Feb.			m.			
21.	14.00	Zeesen	31.38	L.S.	R8/FS/N	Call and Orch.
23.	21.00	Casablanca	48	L.S.	R7/FFS/X	Request for report.
23.	22.30	Vatican	50	L.S.	R7/FFFS/N	Talking until 23.45.
23.	23.30	Radio Colonial	25.2	—	R5/FFS/X	Call.
26.	20.25	Rome	25	L.S.	R6/FS/N	Call.
26.	20.30	Moscow	50	L.S.	R8/FFS/N	Call
26.	22.55	Lisbon	42.9	L.S.	R8/FS/N	Call in English
27.	19.00	G5SW	25.5	L.S.	R5/FR/N	Nat. prog.
27.	23.30	W3XAL	49.18	L.S.	R7/FFS/X	Call.
27.	23.45	W8XK	48.8	L.S.	R6/FFS/X	Call.
28.	00.45	VE9DR	49.96	L.S.	R6/FFS/X	Call.
28.	13.55	Zeesen	31.38	L.S.	R8/FFR/N	Call and Orch.
28.	15.50	Rome	25.	L.S.	R7/FS/N	Call and O.B. (Orch.).
28.	16.00	Vatican	50.	L.S.	R8/N/N	Talking.

Receiver used o—v—2. Outside aerial.

Yours faithfully,

Basingstoke. G. H. W.

TO OUR READERS

When replying to Advertisements kindly mention WORLD-RADIO

Below 100 Metres

By "MICROM"

A RATHER interesting signal on Sunday evening, March 13, was the American transmitter W2XBJ on 20.49 metres. This station, which is really one of the trans-Atlantic telephone transmitters, works under this call-sign on the occasion of German-American exchange of programmes, and is then controlled from the Riverhead (Long Island) receiving station.

On this occasion the German programme was being transmitted by both the Zeesen and Nauen transmitters on 22.7 metres (approx.). At about 17.40, W2XBJ reported that the programme was being taken from DJB (Zeesen), but in order to show that DFC was being received almost as clearly, the programme as received from this station (DFC), was re-broadcast by W2XBJ and was well heard here at excellent loud-speaker strength.

The programme, as received by Riverhead, from Zeesen could be heard from W2XAD (19.56 m.), who was relaying the N.B.C. programme at about 17.45 G.M.T. Reception of W2XAD was not very good, however, the noise level being fairly high.

Later in the evening (at 19.30) another exchange of programme took place, this time between Switzerland and the N.B.C. This programme was heard at full L.S. strength from a station on 38 metres, and more weakly on 20 metres, and could also be heard from W2XAD (19.56 m.), but, as stated above, reception *viâ* W2XAD was only fair.

The Vatican's usual morning transmission now takes place at 10 a.m., and the daylight wave of 19.84 metres is used. The night transmission on 50.26 metres starts at 7 p.m. Both these transmissions have been well received this week as usual.

The 19.68-metre wave of the Radio-Colonial transmitter was heard for the first time at 3 p.m. on Thursday, March 17, and was a fair but noisy signal on the loud speaker.

The 15.93 metre Bandoeng transmitter, PLE, was good and at times excellent, on Tuesday, until about 2.40 p.m., when it faded out. Changing over to PLV on 31.86 metres, a distinct improvement was soon noticed on this wave—which had been weak during the first hours of transmission—and this station then remained a very strong signal until close down. The 58.3-metre transmission from PMY was not heard here, but this wave will probably be well heard by listeners in the East.

American Short-Wave Stations

W2XAD has again been heard several times, being a fair signal on Tuesday, but accompanied by rapid fading and a high noise level, a dance number of Ravel's Bolero being a noticeable item played. Wednesday gave much better results, WGY's programme being held at good loud-speaker strength with but little fading for a considerable period. Conditions generally were very good on Wednesday, all the usual stations being "present" and in great form.

Early on Wednesday morning (about 00.30 a.m.) W8XK, Pittsburg, was heard on 48.86 metres, but although reception was reasonably strong, the programme was completely spoilt by heavy static. At the same time on Thursday morning, however, both W8XK (48.86m.) and W3XAL (49.18 m.) were much better signals, and by 00.40 a.m. were sufficiently strong to over-ride the heavy static, both stations being 90 to 100 per cent. intelligible at this time, with obvious signs of further improvement as the night progressed.

No trace of W2XAF (31.48 m.) could be heard at midnight on either of these two nights, but Bandoeng, PLV, on 31.86 metres was heard at good strength (morse transmission) on Thursday morning at 00.40 a.m.

SHORT-WAVE STATIONS

The times quoted are reduced to G.M.T.

M.	Kc/s	
80	3750	Rome (Italy) 2RO, 9 kW.
70.2	4273	Khabarovsk (U.S.S.R.), 20 kW. 9 a.m. to 12.
62.5	4800	Long Island, W2XV. FRI., 11 p.m. 1.30 a.m.
58	5172	Prague. TUES. and FRI., 7.30—9.30 p.m.
54.52	5502	Brooklyn (N.Y.) W2XBH. Relays WCGU.
51.22	5857	Chapultepec (Mexico) XDA, 20 kW. Daily 3—4 p.m.
50.26	5969	Station du Vatican (Italy) HVJ. 10 kW. D'ly 8.0—8.15 p.m. SUN. 11—11.30 a.m. also.
50	6000	Barcelona Radio Club EAJ25. SAT. 8–9 p.m.
50	6000	Bucharest (Romania), 0.3 kW.
50	6000	Moscow (Relays Moscow T.U.). 8.0 p.m.
49.96	6005	Drummondville, Quebec VE9DR. 4 kW.
49.96	6005	Tegucigalpa (Honduras), HRB, 2.5 kW. Daily (except SUN.), 12 m'nt.—5 a.m.
49.83	6020	Chicago (Ill.) W9XF, 5 kW. Relays WENR. SUN., 5–7 a.m., 1–5.30 p.m., 8.30—11 p.m., and 1—6 a.m. (MON.). Weekdays, 3.15—4.45 p.m., 8.30 p.m.—12 m'nt and (ex. SAT.) 1.30—6 a.m.
49.59	6050	Halifax, N.S. Relays CHNS.
49.5	6060	Cincinnati, W8XAL, 10 kW. Relays WLW.
49.5	6060	Nairobi (Kenya), 7LO.
49.5	6060	Philadelphia (Pa.) W3XAU, 0.5 kW. Relays WCAU. Daily 2—9 p.m. THURS. and FRI., 2 p.m.—6 a.m.
49.43	6069	Vancouver (B.C.) VE9CS.
49.4	6072	Johannesburg (S.Africa). D'ly 3.30–8.30 p.m.
49.4	6072	UOR2, Vienna Experimental.
49.34	6080	Chicago (Ill.) W9XAA, 0.5 kW. Relays WCFL. Daily 2—5 a.m.
49.22	6095	Bowmanville (Canada) VE9GW, 0.028 kW. Weekdays, 11.45 a.m.—3 p.m. and 8 p.m.—3 a.m. SUNDAYS, 5.30 p.m.—4.15 a.m.
49.18	6100	Bound Brook (N.J.) W3XAL, 12 kW. Daily, 10 p.m.—6 a.m.
49.05	6116	Saigon (French Indo-China) F3ICD, 12 kW. Daily 12 noon—3.45 p.m.
49.02	6120	Richmond Hill (N.Y.) W2XE, 0.5 kW. Relays WABC, D'y 1 p.m.—5 a.m. next day.
48.86	6140	Pittsburgh East (W8XK). Relays KDKA. WED. and SAT., 10 p.m.—5 a.m.
48.8	6147	Winnipeg (Canada) VE9CL, 2 kW. Daily (except SUN.) from 12.30—2.30 a.m.
48.65	6167	Mexico City X1F.
48.35	6205	Bogotá (Colombia) HKC. Daily, 3 p.m.
48.05	6243	Barranquilla (Colombia), HKD.
48	6250	Casablanca (N. Africa) CN8MC. Relays Rabat, MON., 8—9 p.m. TUES., 12 noon—1 p.m. and 8—9 p.m.
46.69	6425	Bound Brook (N.J.) W3XL. FRI. 10—11.45 p.m. and 4—6 a.m. SAT. 6.30—11.45 p.m. and 4—6 a.m.
45.38	6611	Moscow, REN (Russia).
45	6667	Constantine (Algeria) 8KR, 0.2 kW. MON. and FRI., 11 p.m.
43	6976	Madrid (EAR 110), TUES. & SAT., 10.30 p.m.
42.9	6991	Lisbon, CT1AA, 2 kW. FRI., 10 p.m.
41.7	7195	Singapore VS1AB, SUN. & WED. 2.30—4 p.m.
41.6	7211	Tenerife Radio Club EAR58, 0.05 kW.
41	7313	Bangkok HSP2, 2.5 kW. (Testing). MON. only 1—4 p.m.
39.7	7556	Bogotá (Colombia) HKF.
39.4	7612	Nuevo Laredo (Mex.) X26A. THUR., 4—5 p.m.
34.68	8650	Long Island W2XV. FRI. 11 p.m.—1.30 a.m.
33	9090	Radio LL (France), 0.5 kW. Daily 12.30—1 p.m. and 6—6.30 p.m. SUN., MON., WED. and FRI., 8—10 p.m. SAT., 7—8.30 p.m. SUN., 10 a.m.—12.30 p.m. and 2.30—4 p.m.
32.5	9230	Paris (FLJ). Time Sig. 8.56 a.m. and p.m.
32.26	9300	Rabat (Radio Maroc), 6 kW. SUN. 7—9 p.m.
31.86	9416	Bandoeng (PLE) 80 kW. TUES. 1.40–3.40 p.m.
31.75	9450	Rio de Janeiro (Brazil). 9.30—11.30 p.m.
31.55	9510	Melbourne (Australia) VK3ME, 5 kW. WED. and SAT., 10 a.m.—11.30 a.m.
31.51	9520	Skamlebæk (Denmark) OXY, 0.5 kW. Relays Copenhagen. Daily from 6 p.m.
31.48	9530	Schenectady, N.Y. (W2XAF), 10 kW. (Aer.) Relays WGY. Weekdays 10.30 p.m.—4 a.m. SAT. and SUN., 9 p.m.—4 a.m.
31.38	9560	Zeesen (Germany), 8 kW. Relays various stations, generally 1 p.m.—12.30 a.m.
31.35	9570	Poznań (Poland), SR1, 1 kW. TUES. 6.45—9.45 p.m. THURS., 6.30 p.m.—1 a.m.
31.35	9570	Springfield (Mass.) W1XAZ.
31.3	9582	Philadelphia (Pa.) W3XAU, 0.5 kW. Daily (except THURS. and FRI.), 9 p.m.—6 a.m.
31.28	9590	Melbourne (Australia) VK3ME, 20 kW. WED. and SAT., 10—11.30 a.m.
31.28	9590	Sydney (Australia) VK2ME, 20 kW. SUN., 6—8 a.m. and 2.30—4.30 p.m.
31.28	9590	Eindhoven (Holland) PCJ, 25 kW. (Closed.)
30.75	9758	Agen. TUES. and FRI., 9—10.15 p.m.
30	10,000	Belgrade. MON. only 8—9 p.m.
29.3	10,238	Heredia (Costa Rica) NRH, 7.5 watts. Daily 10—11 p.m. and 2—3 a.m.
28.98	10,350	Buenos Aires LSX, 20 kW. 8.30 p.m.–12.30.
25.63	11,705	Radio-Colonial (Paris). D'ly 9 p.m.–12 m'nt.
25.53	11,750	Chelmsford (G5SW), 12 kW. 12.30—1.30. p.m. & 6.45 p.m.–12 m'nt. News Bulletins at 12.30 p.m. (SAT. 12.45) 6.15 p.m., & 12 m'dn't. (No transmissions Mar. 25, 26, 27 and 28).
25.5	11,763	Chapultepec XDA, 20 kW. Daily, 8—9 p.m.
25.46	11,777	Saigon (French Indo-China) F3ICD, 12 kW.
25.4	11,810	Bowmanville (Canada) VE9GW. (Exptl.).
25.4	11,810	Rome (Italy) 2RO, 9 kW.
25.34	11,840	Chicago (Ill.) W9XAA. Relays WCFL.
25.25	11,880	Pittsburgh East (W8XK). 5 p.m.—3 a.m.
25.2	11,905	Radio-Colonial (Paris), Daily 4.30—7.30 p.m.
24	12,500	Funchal (Madeira) CT3AQ, 0.05 kW. TUES. and THURS. 9.30—11.30 p.m. SUN. 3.30–5 p.m.
23.8	12,605	Rabat (Radio Maroc), 6 kW. SUN. 11.30 a.m.
21.5	13,950	Bucharest, 0.3 kW. WED. and SAT., 7.10 p.m.
20.5	14,630	Chapultepec XDA, 20 kW. D'ly 7.30—8 p.m.
19.84	15,123	Station du Vatican (Italy) HVJ. 10 kW. Daily 11—11.20 a.m.
19.72	15,210	Pittsburgh East (W8XK). Relays KDKA WED. and SAT., 12 noon—4 p.m.
19.68	15,234	Radio-Colonial (Paris). Daily 1—4 p.m.
19.56	15,340	Schenectady (W2XAD), 20 kW. Weekdays, 6—8 p.m. SAT. and SUN., 6—9 p.m.
15.93	18,830	Bandoeng (PLE) 80 kW. TUES. 1.40–3.40 p.m.

For Long and Medium Wave Stations see page 596.

FOREIGN LANGUAGES SECTION

FRENCH

(Supplementary Notes in connexion with the French Talk, Tuesday, March 22)

(A).—*De certains adverbes français.*

(1) *Mal*, employé avec *pas*, signifie *en assez grand nombre, en assez grande quantité.* Ex.—*Il n'y avait* pas mal *de monde à cette réunion ; j'ai eu* pas mal *d'ennuis ces temps derniers ; il a* pas mal *d'argent ; il y a* pas mal *de gens qui croient ces choses.* (Remarquons que dans le style familier *pas mal* s'emploie sans *ne*).

(2) *Aussi* est ordinairement remplacé par *si* quand la phrase est négative. Ex.—*Il ne fait pas* si *chaud que ce matin ; vous ne courez pas* si *vite que moi.*

Cependant on pourrait se servir de l'adverbe *aussi : Il n'est plus* aussi *riche qu'autrefois.*

(3) Nous disons dans le sens affirmatif : *Et moi* aussi. Dans le sens négatif il faut dire : *Ni moi* non plus. Ex.—*Vous êtes Français, et moi* aussi. *Vous n'êtes pas Français, ni moi* non plus.

(4) Quand *beaucoup* est placé après un comparatif il doit être précédé de la préposition *de* : *Elle est plus jolie* de beaucoup *que sa sœur.*

Si *beaucoup* précède le comparatif il se construit avec ou sans *de* : *Elle est* beaucoup (ou *de beaucoup*) *plus jolie que sa sœur.*

Quand *beaucoup* modifie un superlatif il demande la préposition *de* : *Vous êtes* de beaucoup *le plus instruit ; vous êtes le plus instruit* de beaucoup.

Après certains verbes qui marquent la comparaison on emploie aussi *de beaucoup* : *Nous 'emportons* de beaucoup *; il me surpasse* de beaucoup *; je préfère le café* de beaucoup ; etc. Pendant longtemps on a dit *beaucoup s'en faut* ou *il s'en faut beaucoup* pour marquer une différence de qualité, et par opposition à *il s'en faut* de *beaucoup* qui marquait une différence de quantité. Aujourd'hui, il me semble que cette distinction ne se fait plus ; *il s'en faut* de *beaucoup* est plus répandu et l'emportera certainement.

Toutefois *beaucoup s'en faut* (il s'en faut beaucoup, il s'en faut bien) reste correct quand il n'est pas question de quantité : *Il s'en faut* beaucoup *qu'il soit aussi aimable que son frère ;* mais, *il s'en faut* de beaucoup *qu'il ait payé ses dettes.*

(5) *Combien*, au sens propre, signifie *à quel point*, et c'est bien ce sens qu'il garde devant un verbe, un adjectif ou un adverbe : combien *vous me fatiguez !* combien *dangereux est ce travail !* combien *j'ai été près de succomber !*

Mais, en ce sens, *comme* est d'un usage plus étendu que *combien* : comme *vous me fatiguez !* comme *ce travail est dangereux !* comme *j'ai été près de succomber !*

Devant un nom, avec *de*, combien est plus souvent interrogatif qu'exclamatif, et signifie *quelle quantité ? quel nombre ?*

Ex.—*Combien de frères avez-vous ? Combien ont-ils de chevaux ? Dites-moi combien il est arrivé de voitures.*

Remarquons les phrases : *de combien est-il plus âgé que sa femme ? De combien s'en faut-il ? De combien sommes-nous en retard ?*

Aujourd' hui, quand on veut savoir la date, au lieu de dire *le quantième est-ce ?* ou *quel est le quantième ?* on dit, généralement, *le combien est-ce ? le combien sommes-nous ?* et cela vient, sans doute, de l'habitude que nous avons de dater avec les nombres cardinaux au lieu des nombres ordinaux (*le vingt mars* pour *le vingtième de mars*).

C'est par analogie que l'on dit fréquemment *le combien est-il ? la combien êtes-vous ?* etc. . . .

Ceci n'est pas correct ; après tout, on ne saurait répondre *il est le trois ; je suis la cinq ;* mais, *il est le troisième ; je suis la cinquième.* . . . Il serait préférable de dire *quelle place avez-vous ? Quelle place a-t-il ?*

(B).—*Booz endormi* (V. Hugo : La Légende des Siècles : D'Eve à Jésus, Poème VI).

(1) L'histoire de Ruth a fourni à V. Hugo le sujet d'un de ses plus beaux poèmes. Le poète a pris quelques—uns de ses détails dans le *Livre de Ruth ;* mais il a puisé ailleurs aussi, et il a utilisé ses souvenirs des chapitres XV, XVII et XVIII de la Genèse. De plus, il s'est servi pour le songe de Booz, d'une tradition du moyen-âge chrétien : celle de l'arbre de Jessé.

Avec l'histoire de Ruth et de Booz, le poète a composé un merveilleux nocturne, doux et mystique, inspiré par cette nuit d'été au temps des moissons, et ce clair de lune qui baigne toute la scène :

. . . et Ruth se demandait
Immobile, ouvrant l'œil à moitié sous ses voiles,
Quel dieu, quel moissonneur de l'éternel été,
Avait, en s'en allant, négligemment jeté
Cette faucille d'or dans le champ des étoiles.

Il est certain que l'histoire de Ruth avait frappé l'imagination de V. Hugo quand il était encore enfant. Aux *Feuillantines*, où il avait demeuré pendant sa jeunesse, il avait découvert, un jour, sur le haut d'une armoire, une vieille Bible. Ses deux frères et lui grimpèrent jusqu'à ce livre, qui sentait une odeur d'encensoir ; ils réussirent à le descendre ; et nous dit le poète dans les *Contemplations* :

Nous l'ouvrîmes alors tout grand sur nos genoux,
Et dès le premier mot il nous parut si doux
Qu'oubliant de jouer, nous nous mîmes à lire.
Nous lûmes tous les trois, ainsi tout le matin,
Joseph, Ruth et Booz, le bon Samaritain,
Et toujours plus charmés, le soir nous le relûmes.

(2) *Les tribus d'Israël avaient pour chef un juge.* Voici par quels mots s'ouvre le *livre de Ruth :* " Dans le temps que les Juges gouvernaient le peuple d'Israël il y eut une famine au pays. . . ."

(3) *Des empreintes de pieds de géants qu'il voyait.* . . .

Au chapitre VI de la Genèse nous trouvons les hommes antérieurs au déluge décrits comme des géants : " En ce temps-là, il y avait des géants sur la terre."

(4) *La terre . . . était encor mouillée et molle du déluge.*

Dans le *Discours sur l'Histoire Universelle*, que Victor Hugo avait certainement étudié au Collège, Bossuet évoque : " Le monde encore nouveau, et encore, pour ainsi dire, tout trempé des eaux du déluge."

(5) *. . . un songe en descendit.*
Et ce songe était tel, que Booz vit un chêne
Qui, sorti de son ventre, allait jusqu 'au ciel bleu.

Ce chêne, que voit Booz, est l'arbre généalogique du Christ que les artistes du moyen-âge représentaient comme sortant du corps du patriarche Jessé, fils d'Obed, et petit-fils de Ruth. V. Hugo altère donc un peu la tradition.

(6) *Tout reposait dans Ur et dans Jerimadeth.* Il s'agit ici de l'Ur des anciens Chaldéens au nord de la Palestine et aux confins des sources de l'Euphrate. Quant à *Jérimadeth*, c'est un nom inventé par Hugo. Le poète a probablement altéré *Jerahmeel*, nom d'une tribu qui habitait au sud de la Judée, pour en faire *Jérimadeth.*

D'après Paul Berret " ces deux extrémités géographiques ont été choisies à dessein très distantes l'une de l'autre, afin de donner une idée de l'immensité de la nuit qui s'étend sur la Palestine."

E. M. STÉPHAN.

GERMAN

Compound Verbs—(XV)

(1) Inseparable compounds with *wider* are :—

widerfahren (to happen) : Es ist ihm ein Unglück widerfahren (= begegnet) (He has met with an accident).—Was ist ihnen widerfahren ? (What has befallen them ?)

widerlegen (to disprove) : Er hat jeden meiner Einwürfe (objections) gründlich (thoroughly) widerlegt.

widerraten (to speak against) : Alle Erfahrung widerrät diesem Plan.—Ich werde ihm nicht widerraten, es zu tun.

widerreden (to argue against) : Das widerredet aller Vernunft (That's against all reason).

widerrufen (to revoke, cancel) : Er hat seine damalige Aussage öffentlich widerrufen (He has recanted his former assertion). Das Urteil ist widerrufen (quashed) worden.

sich widersetzen (to offer opposition) : Wenn er sich dem Gesetz widersetzt, wird er verhaftet (arrested).

widersprechen (to contradict) : Wer ihm widerspricht, wird zurechtgewiesen (He who contradicts him is called to order). Er widersprach sich auf jeder Seite (page).—Das widerspricht dem gesunden Menschenverstand.

widerstehen (to resist) : Ich widerstand der Versuchung, so lang ich konnte. If the subject is a thing : to be repulsive, *e.g.*, Das Rizinusöl (castor oil) widersteht mir.

widerstreben (to go against the grain) : Das widerstrebt meinen Gerechtigkeitsgefühl (feeling for what is just and fair).—Da hilft kein Widerstreben (In such a case resistance is of no avail). Ich habe es mit Widerstreben getan = Es widerstrebte mir, es zu tun.—Er hat es ohne Widerstreben zugelassen or erlaubt (He allowed it with a good grace or without offering any resistance).

widerstreiten (to run counter to) : Das widerstreitet allen bisherigen Gebräuchen (customs). Similarly widersprechen.—Der Widerstreit zwischen diesen Meinungen besteht immer noch (The conflict between these opinions goes on).

B. widerhallen (to re-echo) : sich widerspiegeln (to be reflected) are generally used as separable verbs.

(2) Separable Verbs with *wieder* are common, *e.g.* :—

wiederabdrucken (to reprint) : Der Artikel ist in der heutigen Zeitung wieder abgedruckt worden.

wiederbekommen (to have (or get) it back) : Sie bekommen das Buch morgen wieder.—Ich habe es nicht wiederbekommen. Similarly, wiedererhalten.

wiederbringen (to bring back) : Er hat es wiedergebracht.

wiedererzählen (to retell, repeat) : Er hat die Geschichte überall wiedererzählt. Erzählen Sie es wieder (= noch einmal).

wiederholen (to fetch back) : Ich hole das Buch morgen wieder.—Ich habe es schon dreimal wiedergeholt. (Cp. with Ich habe es schon dreimal wiederholt).

wiederkauen (to chew the cud, ruminate) : fig. Er kaut alles wieder (he keeps harping on the same string).—Die Kühe sind Wiederkäuer, sie kauen das Futter wieder. Er ist ein Wiederkäuer (He tells the same old stories again and again).

wiederkehren (= zurückkommen, to return) : Die Jahreszeiten kehren zu bestimmten Zeiten wieder. Similarly, wiederkommen.

wiederschlagen (to strike back) : Er hat ihn gehörig wiedergeschlagen (He paid him back thoroughly by striking him).

wiedersehen (to see again) : Wir sehen uns bald wieder. Auf Wiedersehen !

wiedertun (to do again) : Er tut es nie wieder.

wiederverbinden (to reconnect) : Verbinden Sie mich wieder mit X32 (Telephon), bitte.—Sie haben sich wieder verbunden (become again associates or allies). Der Arzt hat ihm die Wunde wieder verbunden (dressed again).

Such distinctions as wiederrufen (to call back), wieder rufen (to call again) are far from being generally observed, but of course, widerrufen (to recant) is distinctly different.

Sometimes wieder denotes neither " again "

nor "back," but merely indicates that the action is conducive to peace, *e.g.*, Ich werde es wieder gutmachen (I shall make amends, pay compensation or such like). (Er hat sie wieder versöhnt (He has made peace between them).—Sie haben sich wieder versöhnt (They have made it up). (The tacit assumption is that originally there was peace.)

The number of verbs compounded with wieder is almost inexhaustible, because the action expressed by a verb may, of course, be spoken of as repeated and then wieder (again, re-) will do the trick, also the number of verbs of motion is very large and, therefore, when the movement is reversed the compound with wieder gets its chance. It would help students of German if the authorities who have done so much for unified spelling and unified pronunciation would decree that wieder should be written as a separate word when it means "again," and as one word together with the verb when it means "back." Such a reform, if taken up by the schools, would in due course, be generally adopted, as so many others have already become universally accepted.

Exercise 24 (Vierundzwanzigste Aufgabe)

II (1) lag—hatte . . gelegen. (2) legte, hatte . . gelegt. (3) warfen—hatten . . geworfen. (4) war—war . . gewesen. (5) erfror, war . . erfroren. (6) begaben sich, hatten sich . . begeben. (7) erhielt, hatte . . erhalten. (8) verliefs, hatte . . verlassen. (9) entging, war . . entgangen. (10) ihr verstandet, hattet es verstanden. (11) sie bestanden darauf, hatten darauf bestanden. (12) erschien, war . . erschienen. (13) Wir begriffen das, hatten das begriffen. (14) er befahl, hatte . . befohlen. (15) er fuhr, hatte es . . erfahren. (16) es geschah, war . . geschehen. (17) sie ertranken, waren . . ertrunken. (18) standen, hatten . . gestanden. (19) stellte, hatte . . gestellt. (20) Sie bestiegen, hatten . . bestiegen.

III (1) Wie geht es Ihnen ? (Wie geht's ?). (2) Er gehorcht mir. (3) Es gelingt mir. (4) Sie amüsieren (or unterhalten) sich or einander or sich gegenseitig. (5) Wir befahlen ihnen, es zu tun. (6) Sie gleicht ihrer Mutter (or Sie sieht ihrer Mutter ähnlich. (7) Er schreibt mir einen Brief. (8) Wir raten Ihnen, es zu tun. (9) Sie folgen mir. (10) Sie erlaubt mir, es zu tun. (11) Das schadet mir. (12) Sie macht es ihnen bequem. (13) Sie ärgert sich über ihr Betragen. (14) Bestellen Sie mir einen Wagen. (15) Wir baten ihn um Antwort. (16) Es entgeht ihnen. (17) Er schimpft (or murrt) über sie. (18) Sie lachen über seinen Versuch. (19) Er beantwortet meinen Brief (or Er antwortet auf meinen Brief). (20) Er erinnert sich meines Bruders (or an meinen Bruder).

IV Eines Tages ging ein Reisender in ein Wirtshaus. Da er nafs und kalt war (or better und es ihm zu kalt war), wollte er einen Platz beim Feuer (or Ofen) haben, um sich zu wärmen und seine Kleider zu trocknen. Aber als er sah, dafs alle Plätze besetzt waren, bestellte er ein Dutzend Austern und bat (or ersuchte) den Wirt, sie seinem Pferd zu bringen. Als der Wirt das tat, gingen alle Gäste aus dem Zimmer, um das Pferd die Austern fressen zu sehen. Der Reisende nahm nun den besten Platz beim Feuer ein und machte es sich bequem. Als die Gäste wieder hereinkamen, sahen sie, was der Reisende gemeint hatte, und als der Wirt sagte, dafs das Pferd die Austern nicht fressen wollte, lächelte der Reisende und sagte : Dann will ich sie selber essen. O. S.

SPANISH

El artículo neutro "lo"

NO son pocos los estudiantes del idioma español que suelen esquivar (*evade*) el empleo del neutro *lo*, prefiriendo echar mano de (*to make use of*) otra forma de expresión que se aproxime más a la construcción inglesa. Cuando se trata de una idea abstracta ; es decir, cuando *lo* se emplea en el sentido de *lo que es*, como en : "*lo barato* a menudo resulta caro," no ofrece dificultad alguna. Pero en ciertos casos—que dependen del oído—el adjetivo puede ir entre *lo* y *que*, concordando en número y género con el sustantivo a que se refiere. En estos casos "*lo . . . que*" suele equivaler a *cuán* (*how*) o a *el grado en que*. Ejemplos :—

"Vd. no puede figurarse *lo atentos que* han sido conmigo" (=*cuán atentos* han sido).

"Las montañas me dan miedo por *lo* altas y abruptas *que* son" (=por ser tan altas y abruptas).

"No pude alcanzar la cumbre (*summit*) por *lo* penosa *que* resulta la ascensión" (=por resultar tan penosa).

"A pesar de *lo* muy delicada *que* es (=a pesar de ser muy o tan delicada), ella trabaja mucho."

A veces *lo* se emplea de la misma manera con un adverbio, como en :—"Fíjese Vd. en *lo bien que* le va a mi sobrina ese sombrero que lleva" (Look *how well* that hat my niece is wearing suits her).

Otros ejemplos algo distintos que conviene incluir en esta serie son :—

"Lo primero (*the first thing*) que hice fué pedir de comer."

"Lo mejor (*the best course*) sería decírselo francamente."

"¿ Qué le parece a Vd. de lo (aquello—*that affair*) de ayer ?"

"No me extraña nada (*at all*) lo de Don Pedro y su hijo."

"Ha pasado lo de siempre (the usual thing has happened)."

Lectura (*continuación*). Pasando por alto (*over*) los incidentes de su viaje de Londres a París, doy comienzo a (*empiezo*) esta relación con su salida de la capital francesa.

"Subí al rápido (*express*)—dice ella—que me había de llevar a lo desconocido, y quedé muy contenta (*pleased*) al notar que mis compañeros de viaje eran todos españoles, pues así me iba a acostumbrar a oir hablar el español, y oirlo hablar familiarmente por naturales (*natives*).

Arrellanándome (*settling down*) en mi asiento de rincón (*corner*), me dispuse a escuchar la conversación de los demás ; pero me llevé (sufrí) un gran chasco (*disappointment*), pues casi en el momento de arrancar (ponerse en marcha) el tren, salieron todos menos un joven, dejándome a solas (*alone*) con él. Así, a la fuerza, tuve que soltar la lengua, pues sabía que en el continente, y particularmente cuando de españoles se trata, la urbanidad exige que entre pasajeros se entable conversación. W. F. BLETCHER.

(*continuará*)

Esperanto Transmissions (Mar. 27—April 2)

Sunday.—Ljubljana, 8.0 a.m., Talk.
Minsk, 9.0 p.m., News.
Tuesday.—Tallinn, 7.0 p.m., News.
Leningrad, 9.5 p.m., News.
Wednesday.—Stuttgart, 5.40 p.m., "El originala Verkaro" (Dr. Vogt).
Thursday.—Paris PTT., 5.45 p.m., Course (Prof. Rousseau).
Radio Suisse-Romande, 6.10 p.m., Course (P. Bouvier).
Kaunas, 8.15 p.m., Talk.
Breslau-Gleiwitz, 9.35 p.m., Talk.
Friday.—Stuttgart, 6.30 p.m., Week's Programme (Prof. Cristaller).
Radio-Cote d'Azur, 8.10 p.m., Talk.
Radio-Normandie, 9.0 p.m., Course.
CT1AA (42.9 m.), 10.30 p.m., Lesson, etc.
Saturday.—Heilsberg, 5.40 p.m., Week's Programme.
Huizen, 6.20 p.m., Course.
Lyon-la-Doua, 8.15 p.m., News.
Lisbon (283 m.), 10.30 p.m., Course.
Leningrad, 9.5 p.m., News.

TO OUR READERS
When replying to Advertisements please mention WORLD-RADIO

WHICH STATION WAS THAT ?

(*Continued from page 594*)

(Yealmpton) : Regret, cannot trace. **ECAP (Belfast)** : (1) Radio Strasbourg ; (2) Breslau relaying Berlin. **WALCOT (Wilbraham)** : Moscow (Old Komintern). **WHIRLWIND (Wellington)** : (1) Ruegen (Germany) coastal telephony with ships ; (2) Write to *Radio Society of Great Britain*, 53, Victoria Street, London, S.W.1 ; (3) Königs Wusterhausen (Press) on 2,625 m.) ; (4) the list published covers only the broadcasting band ; (5) Scheveningen-Haven (Holland) ; usually starts up at 7.40 a.m. G.M.T. **B. R. S. (Ealing)** : Moscow (RV37) local station relaying Moscow T.U. or Moscow (Old Komintern). **JEKYLL (Liverpool)** : Possibly a test ; regret, cannot trace. **ONDE COURTE (Wormit)** : French private experimental transmitter ; cannot give address in these columns ; (2) EAQ, Aranjuez (Spain) on 30.426 m. **F. M. M. (Brixton)** : (1) apparently aérodrome short-wave transmission to Belgian air liner ; (2) yes, VK2ME, Sydney (N.S.W.) direct. Transmission for Canada and other British possessions on Amercian continent. **S. O. S. (Erith)** : Regret, cannot trace. **EUNA (W.13)** : Rabat on 23.85 m. relaying Radio Maroc. **LUCRETIUS (Birmingham)** : F8BP, Rugles (near Paris) on 42.80 m. **PORTABLE (Dundee)** : Kiev (1,034.5 m.). **WARDUS (Festiniog)** : G6RX, Rugby testing. **JOE (Kingswood)** : (1) regret, cannot trace ; (2) Cork. **ASH (Sunderland)** : Regret, cannot trace but apparently French or Belgian short-wave station calling Congo Free State. **OBERTELLE (East Didsbury)** : Katowice ; own concert. **Q. (Diss)** : **LOUD-SPEAKER CHASSIS (Llanelly)** : G6RX, Rugby testing. **KNOB TWISTER (Edmonton)** : Florence. **ROCQUAINE (Hythe)** : Radio Maroc (Rabat) ; power was recently increased to 6 kW. **JAZZ FIEND (North Harrow)** : Turin. The call was : "Radio Nord Italia." **ONEHUNDREDANDSEVENTEENTH STATION (Beaconsfield)** : Reykjavik ; a relay of the Copenhagen programme. **NEWLANDS (Glasgow)** : Frankfurt-on-Main, Mühlacker, Breslau ; early morning physical exercises. **AMBROSE (Norwich)** : Moscow (Stalin) ; concert for night workers. **WONDER BAR (Heanor)** : Please number your queries. (1) regret, cannot trace ; (2) G6RX, Rugby testing.

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Last Week's Log

(*March* 13—19)

By "THE SEARCHER"

DURING the week between March 13 and March 19 slightly unsettled conditions —from a wireless point of view—have prevailed. This state of affairs can no doubt be accounted for by the variations in the weather, the warmer days experienced naturally bringing about an increase in atmospheric interference. On several evenings more crackles were noted than has been the case for a considerable time, the worst nights being on the Thursday and Friday when a rather irritating amount of noise was audible if the volume was increased on the weaker stations, but, strangely, it seemed mostly confined to the medium wave-band. One thing we can be assured of during the coming summer months is less trouble from interference, for, unless atmospherics are unusually strong the increased power of so many transmitters should give a much better signal to noise ratio than we have had in the past, and the immense volume of such stations as Prague, Warsaw, and Radio-Paris seems quite capable of reaching us through all but the worst of storms.

Reception on the long waves was only a little less favourable than during my previous review. Huizen, although providing the same volume, was badly heterodyned during the earlier part of the evening on several occasions, while even Warsaw's tremendous signal was similarly marred on a few nights. Moscow (Trades Union) was received very well on most evenings when tried for, but I usually find a fair amount of background noise with signals from him. On his good nights Warsaw was really excellent and several of his very delightful programmes are well worth looking out for, while Radio-Paris is completely reliable. Motala seems to have suffered from jamming recently, but when clear gives a very good signal. Kalundborg and Oslo were good throughout the week—in fact, there is usually less interference on this end of the wave band than was once the case, until one gets below 1,000 metres.

Many stations, I regret to say, have obtained bad marks solely on account of heterodynes. The most notable decline was that of Toulouse, who seems to have weakened suddenly for no reason, and Rome is nothing like he was. Prague, Brussels No. 1, Langenburg, Beromünster, and Heilsberg have not changed in the slightest, but amongst several of the other better known stations variations have taken place from day to day.

Katowice is still a good signal, and Sottens on the whole gives fine results, apart from a little fading at times. Lwów is a most surprising station on a number of occasions, and is often to be heard at good strength during daylight hours, while his volume on some evenings compares with the best.

Mühlacker is always reliable, but Strasbourg seems to have begun a period of fading which completely ruins reception. Bordeaux is still well received. Hörby, Trieste, and Gleiwitz were all very good in turn, while Nürnberg provides an excellent signal on most nights in spite of his comparatively low power. Turin, while not very powerful, can usually be expected to give very good loud-speaker results, and Bratislava, to whom the same applies, has given a fairly consistent run of good nights. Brussels No. 2 is quite up to form, but Barcelona has not given more than very patchy reception during the whole of the week. Stockholm, when at his best, is still coming through with great volume, but he now has his poor nights when fading mars results. Broadly speaking, there are considerably more stations to be heard at excellent strength at the moment than for the same period last year, atmospherics have diminished, but heterodynes have increased.

Interference between Stations

(*March* 11—16)

RADIO-VITUS continues to use about 1,015 kc/s, to which he went on the 8th. It is believed that he does not intend to remain there and that he may move later on to 1,031, or perhaps on 941 kc/s.

Zagreb, which has been jammed for a long time by Falun, a Swedish relay on 977 kc/s, was off its frequency for a few days and worked on 981 kc/s. It was thus heterodyning Bordeaux-Lafayette (986 kc/s).

Lyons-la-Doua (644 kc/s) has for some time been interfered with by a station using 642 kc/s. This station has recently been identified; it is a Norwegian relay, probably supposed to use 662 kc/s, the International Common Wave, and thus 20 kc/s off his allotted frequency. Tartu, the Estonian relay using 675—676 kc/s, constantly interferes with Rome (680 kc/s), which is sometimes heterodyned in a really unpleasant way.

Tashkent, a Russian station of 25 kW (but extremely distant), using 256 kc/s, now and then interferes with Kalundborg. A Russian station, probably Moscow-Popoff, was heard on 268 kc/s recently, and was jamming the telegraphic station above referred to.

Lille, who is still experiencing the severe heterodyne due to Valencia, is furthermore interfered with now by an unsteady station using about 1,134 kc/s, which interferes also with Moravská-Ostrava.

Radio-Paris (174 kc/s) is alternatively interfered with by a telephonic station and by a telegraphic one, both Russian and using 178 kc/s. Generally, the troubles are more severe when due to the telephonic one, who is Nijni Novgorod Radio (REA), a station giving information for the navigation of the Volga. The telegraphic station is either RAX (Kharkoff, 20 kW) or REA (4 kW). L. B.

Which Station Was That?

Answers to Correspondents

M. M. B. (Hampstead): Kaunas. **ASPERULA (E. Croydon)**: Warsaw (No. 2) on 214.2 m. **YOMA (Hendon)**: Regret, cannot trace. **WESTOVER (Bournemouth)**: Vienna; heard through Graz. **BUSTER (Acton)**: (2) yes, Leningrad. **ISWAS (Upminster)**: This was Ecole Supérieure (Paris); gramophone records. **MACBETH (Harrow)**: (*a*) Scheveningen-Haven (Holland); (2) Leningrad. **DIXMUDE (Merthyr Tydfil)**: (1) possibly LR6, Radio Mitre, Buenos Aires (350 m.); (2) WHAM, Rochester (N. Y.); (3) if Spanish, LR9, Radio Fenix (Buenos Aires), 291.2 m. **ELMDENE (Harrow)**: Radio Strasbourg; extended programme. **JETHRO (Norwich)**: Kiev. **KIPPER (Swansea)**: Moscow (T.U.); programme for night workers. **PUNCH (Ulverston)**: Bergen; lecture to advanced English students. **CALIPER (Wimbledon)**: Kiev (1,034.5 m.). **AUSTWICK (Goole)**: Proprietary names must not be used as *noms-de-plume*. Bergen; lecture for advanced English students. **KEN (Evercham)**: LSE, Buenos Aires (14.38 m.). Also transmits on other wavelengths. **LITTLE CAESAR (Neath)**: This was W2XAD, Schenectady (N.Y.) on 19.56 m. (15,340 kc/s). **RAFFLES (Dartford)**: Details and wavelength are too vague to permit identification of short-wave transmission. **OUKOIDA (Acton)**: Kharkov. **DEWDROP (Bradford)**: Vienna Experimental. **MISSING LINK (Hamble)**: Wilno (566 m.). **LIZ (Belfast)**: (1) Leningrad; two-way communications with provincial studios; (2) Dombrowski mazurka. **MONTI (Southampton)**: Leningrad. **W. J. L. (Jedburgh)**: Apparently Poznań. **IRISHMAN (Woodford Green)**: (1) Radio Maroc (Rabat); (2) Radio Normandie (Fécamp). **CANNY (Sheffield)**: Apparently a test; regret, cannot trace. **PUZZLED (Sevenoaks)**: Special transmission to the United States, heard through Radio-Nations (Prangins) on 35 m. **NONENTITY (Margate)**: Your enquiry received on 15th was dated 19th; regret, cannot trace. **KILOCYCLE (Weymouth)**: We have no information regarding an American short-wave broadcast on 24.83 m.; possibly W8XK, E. Pittsburgh (25.25 m.). Transmission was made through Prangins station, Switzerland. **SAB-BA-LAB (Kingsland)**: Radio Normandie, Fécamp; sponsored concerts. The transmission *is* from Fécamp. **SUNDAY EVENING (Torquay)**: Königs Wusterhausen, relaying Berlin. **GOLDFINCH (Bow)**: Far too vague for identification of short-wave station; some estimate of wavelength must be given. **SEARCHER (London)**: (1) Prague; relay of Festival concert from Smetana Hall; (2) Munich; (3) Radio Normandie, Fécamp. **GOOD RESULTS (West Wickham)**: (1) Scheveningen-Haven (Holland); commercial transmitter only; (2) cannot trace any such relay in French programmes but possibly Radio Lyons. **FLY BOB (Glasgow)**: Moscow (Stalin). **BLACKFACED (Glasgow)**: Radio-Nations (Prangins, near Geneva); special transmission destined to United States. **NEW (Yiewsley)**: Possibly GBS, Rugby (24.69); actual transmission was made through Prangins (Switzerland). **BUNDLE (Sanderstead)**: Radio Nations (Prangins) on 35 m. **SCRUM (Belfast)**: (1) Belgian amateur experimental transmitter; (2) Bell Telephone Laboratories, Deal Beach, N.J.; (3) Poste Colonial (Pontoise-Paris); (4) Coltano (Italy). **LUCKY KATE (Bow)**: A.m. or p.m.? your details are far too vague. Regret, cannot trace. **CHIMES (Newtown)**: (1) Kalundborg; relay of concert and dance music from Ritz Restaurant, Copenhagen; (2) Moscow (T.U.); broadcast of two-way conversation with other USSR studios; late concert for night workers. **WISH I KNEW (Cambridge)**: Mühlacker. **EARLY RISER (Loughborough)**: Moscow (Old Komintern). **TORONTO (Bishop Auckland)**: W3XAL, relaying WJZ, Boundbrook (N.J.); NBC programme. **SHORT-WAVER (Gillingham)**: (162) W1XAZ (last letter pronounced "Zee") E. Springfield (Mass.) relaying WBZ (Springfield) and WBZA (Boston) on 31.35 m. **BABE (Neath)**: G6RX (Rugby) on 88.4 m. **KNOT COAL (Castle Eden)**: Yes, ship-shore telephony, but cannot trace transmitter. **DOT (Kingston-on-Thames)**: Radio Normandie (Fécamp). **WAVE TRAP (Manchester)**: Oslo; extended programme (gramophone records) and relay of Berlin broadcast of Presidential Election results. **EMKAY (West Worthing)**: Motala relaying Stockholm. **BEN GRAY (Dalston)**: Radio Normandie (Fécamp). **SEARCHER (Exeter)**: Reykjavik. (2) Oslo relaying Berlin. **TWIN TUNERS (Sunderland)**: Presume Sunday, March 13 not 11; Katowice relaying dance music from Warsaw. **3 VALVE TOURIST (Maidstone)**: Radio Normandie (Fécamp). **GILLBEE (Bosham)**: W2XDJ (14,800 kc/s) Bell Telephone Laboratories, Deal Beach (N.J.), calling HVJ, Vatican (Rome) and Radio-Nations, Switzerland. **QUISSY (Prestwood)**: Radio-Paris testing; gramophone records. **YALE (S.E.3)**: Apparently French experimental transmitter as items were not advertised. **TINKER (Giffnock)**: (1) Radio Maroc (Rabat); (2) Radio Strasbourg; (3) possibly CT1AA, Lisbon, but cannot confirm. **ECAP (Belfast)**: (1) not advertised, but possibly a relay of Moscow or Leningrad by new Baku station on 1,715 m.; (2) regret, cannot trace; (3) Belgrade; sports' bulletin. **AERIAL BUG (Bromley)**: VE9CL, Winnipeg (Man.), on 48.80 m.; experimental transmission twice monthly (15th and 30th). **BOZO (Enfield)**: This was Motala; extended broadcast in view of German Presidential elections, results of which were relayed at intervals from Berlin. **XXXXXXX (Oxford)**: Could be only an harmonic of Fécamp; (2) Tashkent (USSR) on 39.40 m. **SCRAP THE LOT (Edinburgh)**: Leningrad. **PIP CERTIF (Ilford)**: Moscow. **G. G. (Bournemouth)**: Radio-Nations (Switzerland) on 35 m. **NAVEB (Llansamlet)**: Reykjavik. **XYZ (Iver)**: Cannot understand your estimate of wavelength namely, "top of long wave between 540 and upwards Budapest and Brussels No. 1." No relay of London Regional was advertised by a foreign station; apparently direct pick-up on your receiver. **WONDERING E. A. C. (Hoxton)**: Radio Normandie (Fécamp). **TWIDDLER (Penrith)**: No likely station between Radio-Paris and Berlin; a re-timed concert from Radio-Paris. **RADIO MANIAC (Southend-on-Sea)**: Local amateur experimental transmission. **LONGY (Finchley)**: G6RX, Rugby, but WL is usually given as 88.4 m. (3,396 kc/s). **STIFF (Bedford)**: Regret, cannot trace. Not advertised in programme (63), possibly relayed by Moscow (T.U.) and Astrakhan (R.V.35). Russian stations frequently relay foreign broadcasts. **ELBATRIP (Sheffield)**: (1) yes, details tally with the Sottens relay from Nürnburg; heard through Geneva; (2) CT1AA, Lisbon (282.25 m.); (3) cannot confirm but possibly Sebastopol, now on 473.2 m. **CALIBRATING (N.W.7)**: (1) cannot trace without some indication of wavelength; EAQ, Madrid, works on various channels; (2) vague but possibly French amateur experimental transmitter; (3) some indication of wavelength must be given; regret, cannot trace without this information. **MADURO (Lisbon)**: Surely Radio Normandie (Fécamp), which also works on Saturday nights from midnight to 3.0 a.m. (Sunday). **NUBS**

(*Continued on page* 593).

READ INSTRUCTIONS IN IDENTIFICATION COUPON

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Each query should be numbered and the questions on the coupon carefully answered. Letters must be addressed to the Editor, *World-Radio*, Savoy Hill, W.C.2.

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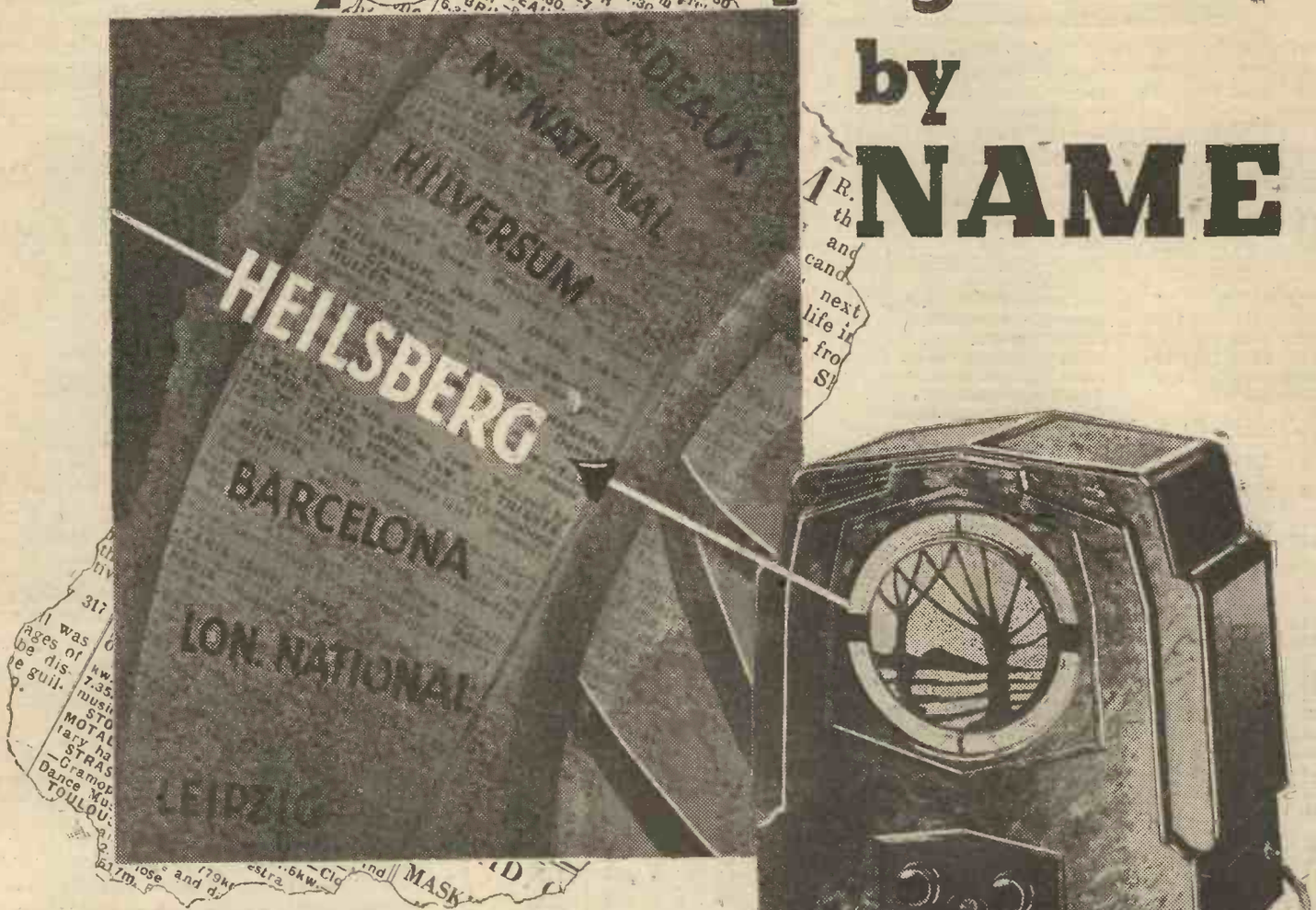

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Stations in Order of Frequencies and Wavelengths

Corrected in accordance with the latest official information available at the time of going to press

The figures in black type represent the power according to the Copenhagen Power-Rating, but carrier-wave power only is shown

Kc/s	M.	kW.	Station	Dial Readings
155	1935	7	Kaunas (Lithuania)	
160	1875	8.5	Huizen (Holland) (Hilversum programmes and announcements).	
167	1796	54	Lahti (Finland) (relays Helsinki)	
174	1725	13.5 75	Radio Paris (CFR)	
183.5	1635	60	Königs Wusterhausen (Zeesen) (Germany) Relays Berlin.	
193	1554.4	30	Daventry National (Great Britain)	
195	1538	7	Ankara (Turkey)	
202.6	1481	100	Moscow (Old Komintern) (RV1) (Russia)	
207.5	1445.7	13	Eiffel Tower (FLE)	
212.5	1411	120	Warsaw No. 1 (Poland)	
222.2	1350	0.5	Kasbah (Tunis)	
222.5	1348	30	Motala (Sweden) (relays Stockholm)	
230.1	1304	100	Moscow (Trades Union)	
238.1	1260	4	Novosibirsk (Russia)	
242.5	1237		Vienna Experimental (Austria)	
244	1229.5	0.6	Boden (Sweden)	
250	1200	5 21	Istanbul (Turkey) Reykjavik (Iceland)	
260	1153	7.5	Kalundborg (Denmark) (relays Copenhagen).	
268.5	1116	40	Moscow, Popoff	
277	1083	60	Oslo (Norway)	
284.9	1053	10	Tiflis (Russia)	
300	1000	100	Leningrad (Russia)	
320	937.5	20	Kharkov (Russia) RV20	
353.5	848.7	4	Rostov-Don (Russia)	
368.1	815	20	Kiev (Russia)	
385	778	2	Petrozavodsk (Russia)	
389	770	0.6	Östersund (Sweden) (relays Sundsvall)	
394	761.4	1.8	Nijni Novgorod (Russia)	
395	760	1.5	Geneva (Switzerland)	
416.7	720	20	Moscow (Experimental)	
428.6	700	4	Minsk (Russia)	
442	680	0.6	Lausanne (Switzerland)	
522	574.7	2.5	Ljubljana (Yugoslavia)	
527	570	0.25	Freiburg-im-Breisgau (Germany) (relays Stuttgart).	
530	566	0.25	Hanover (Germany) (relays Hamburg)	
531	565	2	Smolensk (Russia)	
533	563	16	Wilno (Poland)	
536	560	0.25 1.5 0.7	Augsburg (Germany) (relays Munich) Kaiserslautern (Germany) (relays Munich). Hamar (Norway) (relays Oslo)	
545	550	18.5	Budapest (Hungary)	
554	542	3 10	Palermo (Italy) Sundsvall (Sweden)	
563	533	1.5	Munich (Germany)	
572	525	15	Riga (Latvia)	
581	517	15	Vienna (Rosenhügel) (Austria)	
590	509	15	Brussels No. 1 (Belgium)	
599	500.8	20	Florence (1FI) (Italy)	
603.6	497	1.2	Moscow (Russia)	
608	493.4	1.2	Trondheim (Norway)	
614	488.6	120	Prague (Czechoslovakia)	
625	480	50	North Regional (Manchester) (Great Britain)	
630.2	476	1.2	Sebastopol (Russia)	
635	473	60	Langenberg (Germany)	
644	465.8	1.5 0.5	Lyons (La Doua) (France) (relays PTT). Tartu (Estonia)	
653	459	60	Schweizerischer Landessender (Beromünster) (Switzerland)	
662	453.2	0.5 0.5 0.5 0.7 1 0.6 0.1 0.15	Bödo (Norway) Danzig (Free City) (relays Königsberg). Klagenfurt (Austria) (relays Vienna) Porsgrund (Norway) (relays Oslo) Salamanca (Spain) (EAJ22) San Sebastian (Spain) (Mon., Wed. & Fri. 7.30—9 p.m., other days 10 p.m. to midnight). Tromsö (Norway) Uppsala (Sweden) (relays Stockholm)	
666	450.4	4	Odessa (Russia)	
671	447.1	0.35 0.08 0.7 0.15	Aalesund (Norway) Notodden (Norway) Paris (PTT) (Ecole Supérieure) (France) Rjukan (relays Oslo) (Norway)	
680	441	50	Rome (1RO) (Italy)	
689	436	0.25 55	Malmberget (relays Boden) (Sweden) Stockholm (Sweden)	
697	430.4	2.5	Belgrade (Yugoslavia)	
707	424.3	2 100	Madrid (Union Radio) (EAJ7) (Spain) 7—8.30 p.m. and (except Monday) 10 p.m. to 12 midnight. Madrid (Radio España) (Spain) 5—7 p.m. (Mon. 5 p.m. to 12 midnight) Moscow-Stalin (Russia)	
715	419.5	1.5	Berlin (Witzleben)	
721.1	416	2.5	Rabat (Morocco)	
725	413	1.2	Dublin (2RN) (Ireland)	
734	408	16	Katowice (Poland)	
743	403	25	Radio Suisse Romande (Sottens) (Switzerland)	
752	398.9	25	Midland Regional (Great Britain)	
761	394	12	Bucharest (Romania)	
770	390	10 1.5	Archangel (Russia) Frankfurt (Germany)	
779	385	8	Toulouse (Radio) (France)	
788	381	16	Lwów (Poland)	
797	376.4	1	Glasgow (5SC) (Great Britain)	
806	372	1.5	Hamburg (Germany)	
810	370.4	0.5	Radio LL (France)	
815	368.1	1 13.2 1.5	Bolzano (Italy) (1BZ) Helsinki (Finland) Seville (Union Radio) (EAJ5) (Spain)	
816	367.6	0.7	Fredriksstad (Norway) (relays Oslo)	
824	364	1	Bergen (Norway)	
825.3	363.3	13	Algiers (N. Africa)	
832	360.5	60	Stuttgart (Mühlacker) (Germany)	
843	356	50	London Regional (Great Britain)	
852	352.1	7	Graz (Austria) (usually relays Vienna)	
855.5	351	1.2	Leningrad (Russia)	
860	349	8	Barcelona (Radio Barcelona) (EAJ1) (Spain)	
869	345	11.5	Strasbourg (Brumath) (France)	
878	342	35	Brno (Czechoslovakia)	
887	338.2	15	Brussels No. 2 (Belgium) (Flemish programme).	
896	335	5.5 1.9	Cadiz (Spain) Poznań (Poland)	
905	331.5	7	Milan (Italy)	
914	328.2	2 1.2	Grenoble (PTT) (France) Poste Parisien (Paris)	
923	325	1.5	Breslau (Germany)	
932	322	10	Göteborg (Sweden) (relays Stockholm)	
941	319	0.25 1.5 1	Dresden (Germany) (relays Leipzig) Naples (1NA) (Italy) Sofia (Rodno-Radio) (Bulgaria)	
950	315	1.6	Marseilles (PTT) (France)	
959	312.8	1.5 10	Cracow (Poland) Genoa (1GE) (Italy) Radio-Vitus (France)	
968	309.9	1	Cardiff (5WA) (Great Britain)	
977	307	0.5 0.75	Falun (Sweden) Zagreb (Yugoslavia)	
986	304	13	Bordeaux-Lafayette (PTT) (France)	
995	301.5	50	North National (Manchester) (Great Britain)	
1004	298.8	8.5	Hilversum (Holland) (Huizen programmes and announcements)	
1013	296.1	11	Tallinn (Estonia)	
1022	293	2.5 0.7	Kosice (Czechoslovakia) Limoges (PTT) (France)	
1031	291	0.25 1 13.2	Pietarsaari (Jacobstad) (Finland) (relays Helsinki) Tampere (Finland) (relays Helsinki) Viipuri (Viborg) (Finland) (relays Helsinki)	
			British Relay Stations	
1040	288.5	1 1 0.12 0.3 1 0.12 0.12 0.12	Aberdeen (2BD) Bournemouth (6BM) Dundee (2DE) Edinburgh (2EH) Newcastle (5NO) Plymouth (5PY) *Sheffield (6FL) Swansea (5SX)	
1043	287.6	0.7	Lyons (Radio) (France)	
1049	286	0.8	Montpellier (France)	
1058	283	0.5 0.5 0.5 0.5	Berlin Relay (Germany) Magdeburg (Germany) Stettin (Germany) (relays Berlin) Innsbruck (Austria) (relays Vienna)	

* Not radiating.

STATIONS IN ORDER OF FREQUENCIES AND WAVELENGTHS (Continued)

Kc/s	M.	kW.	Station	Dial Readings	
1063	282.2	2	Lisbon, Portugal		
1067	281	0.75	Copenhagen (Denmark)		
1071	280		Radio Liége (Belgium)		
1076	279	14	Bratislava (Czechoslovakia)		
1085	276.5	60	Heilsberg (Germany) (rel. Königsberg)		
1096	273.7	7	Turin (Italy)		
1103	272	1.3	Rennes (France)		
1112	270	0.25	Bremen (Germany) (relays Hamburg)		
1121	267.6	0.7	Oviedo (Spain)		
		1.5	Radio Valencia (Spain)		
1130	265.4	1.3	Lille (PTT) (France)		
1137	263.8	11	Moravská-Ostrava (Czechoslovakia)		
1147	261.6	50	London National (Great Britain)		
1157	259	2	Leipzig (Germany)		
1166	257	10	Hörby (Sweden) (relays Stockholm)		
1175	255	0.7	Toulouse (PTT) (France)		
1184	253	5	Gleiwitz (Germany) (relays Breslau)		
1193	252	1	Almeria (Spain) (EAJ18)		
		1	Barcelona (Association National) (EAJ15)		
		0.25	Trollhättan (Sweden)		
1202	249.6	0.3	Varberg (Sweden)		
1205	249		Juan-les-Pins (Nice) (France)		
1211	247.7	0.2	Kalmar (relays Stockholm)		
		10	Trieste (Italy)		
1220	246	0.5	Berne (Switzerland)		
		0.4	Cartagena (Spain)		
		0.25	Cassel (Germany) (relays Frankfurt)		
		0.2	Eskilstuna (Sweden) (relays Stockholm).		
		0.25	Kiruna (Sweden) (relays Boden)		
		0.5	Linz (Austria) (relays Vienna)		
		0.4	Säffle (Sweden) (relays Stockholm)		
		0.6	Turku (Åbo) (Finland) (relays Helsinki).		
1229	244.1	0.5	Basle (Switzerland)		
1238	242	1	Belfast (2BE) (Ireland)		
1247	240.6	0.5	Stavanger (Norway)		
1250	240	1.5	Radio Beziers (France)		
1256	239	2	Nürnberg (Germany) (relays Munich)		
1265	237.2	3	Bordeaux Sud-Ouest (France)		
		1	Radio-Nîmes (France)		
		0.2	Örebro (Sweden) (relays Stockholm)		
1274	235.5	0.5	Christiansand (Norway)		
1283	235	2	Lodz (Poland) (Experimental)		
1292	232.2	0.25	Kiel (Germany) (relays Hamburg)		
		0.25	Norrköping (Sweden)		
1301	231	0.2	Hälsingborg (Sweden)		
		1.25	Malmö (Sweden) (relays Stockholm)		
		0.2	Umea (Sweden)		
1310	229	0.05	Uddevala (Sweden)		
1319	227	0.25	Aachen (Germany)		
		1.5	Cologne (Germany)		
		0.5	Münster (Germany)		
1328	226	0.15	Hudiksval (Sweden)		
1337	224.4	1	Cork (6CK) (Ireland)		
1364	219.9	1	Fécamp (Radio Normandie) (France)		
1373	218	0.5	Flensburg (Germany) (relays Hamburg).		
		0.7	Pori (Björneborg) (Finland) (relays Helsinki).		
		0.5	Salzburg (relays Vienna)		
1382	217	0.25	Karlstad (Sweden)		
		0.5	Königsberg (Germany)		
1391	216	0.2	Halmstad (Sweden)		
			Radio Chatelineau (Belgium)		
1400	214.2	1.9	Warsaw, No. 2 (Poland) (Experimental)		
1450	207	0.15	Borås (Sweden)		
1460	206	0.2	Ornskoldsvik (Sweden)		
1470	204	0.2	Gävle (Sweden) (relays Stockholm)		
1480	203	0.25	Kristinehamn (Sweden)		
1490	202	0.25	Jönköping (Sweden) (relays Stockholm)		
1530	196	0.2	Karlskrona (Sweden) (relays Stockholm).		
1714	175		St. Quentin (France)		

DEVIATIONS

The following are the actual deviations from the official frequencies, as noted during measurements made at the Tatsfield Checking Station. All differences of 1.9 kc/s and over are shown.

605.1	495.8	—	Trondheim (Norway)		
666.7	450	—	Paris R. T. T. (France)		
675	444.5	—	Tartu (Estonia)		
981	305.8	—	Falun (Sweden)		
1006.4	298.1	—	Hilversum (Holland)		
1015	295.5	—	Radio Vitus (France)		
1267.3	236.7	—	Bordeaux-Sud-Ouest (France		

(*For List of Short-Wave Stations see page* 591.)

Schedule of Advance Programmes

(STRICTLY COPYRIGHT)

For the benefit of traders who may wish to make arrangements for demonstrating, we are printing each week a schedule of the programmes to be transmitted by the National and Regional stations. It will be noticed that these schedules concern programmes to be transmitted a fortnight hence, and it is felt that they will also be of particular service to those of our readers living abroad who will be able to use them in connexion with the reception of the Experimental Short Wave Station, G5SW, which relays either the National (5XX) or London Regional programmes from 7 p.m.

News Bulletins are transmitted daily (except on Sunday) at 12.30 p.m. (Saturdays, 12.45), 6.15 p.m., and midnight.

SUNDAY, APRIL 10

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
AFTERNOON	Light Music Orchestral Con.	As National Military Band	Organ Recital As London Reg.	Studio Orchestra Pianoforte Recital
EVENING	Hotel Orchestra	Haydn Concert	As London Reg.	As London Reg.

MONDAY, APRIL 11

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Studio Concert	As Midland Reg.	Cinema Orch.	As Midland Reg.
AFTERNOON	Cinema Orch. Gram. Records Hotel Orchestra	As North Reg. As Midland Reg. As National	As North Reg. Studio Orchestra	Organ Recital As Midland Reg. As National
1ST EVENING PROGRAMME	Talks Revue	Light Music Orchestral Con.	Dance Music As London Reg.	As London Reg. Studio Orchestra
2ND EVENING PROGRAMME	Chamber Music Dance Music	Amateur Orch. Dance Music	Revue As London Reg. (till 11 p.m.)	Concert Party As London Reg.

TUESDAY, APRIL 12

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Organ	As North Reg.	As North Reg.	Ballad Concert
AFTERNOON	Hotel Orchestra Sonata Recital Hotel Orchestra	As North Reg. As Midland Reg. As National	As North Reg. Studio Orchestra	Midday Concert As Midland Reg. As National
1ST EVENING PROGRAMME	French Talk Military Band	Light Music B.B.C. Dance Orch.	Light Music Chamber Music	Organ Recital As London Reg.
2ND EVENING PROGRAMME	Play Dance Music	Organ Recital Discussion Dance Music	Band Concert As London Reg. (till 11 p.m.)	Pianoforte Duets As London Reg. As London Reg.

WEDNESDAY, APRIL 13

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Organ Gram. Records.	As Midland Reg.	Studio Orchestra	As Midland Reg.
AFTERNOON	"Midday" Concert Symphony Con. Cinema Organ.	As Midland Reg. As North Reg. As National	Organ Recital As North Reg.	As Midland Reg. Studio Orchestra As National
1ST EVENING PROGRAMME	Talks Symphony Con.	Light Music Revue	"Light Classics" As London Reg.	Studio Orchestra As London Reg.
2ND EVENING PROGRAMME	Symph. Con. contd. Dance Music	Band Concert Dance Music	Choral Society As London Reg. (till 11 p.m.)	Play As London Reg.

THURSDAY, APRIL 14

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Organ	As Midland Reg.	Cinema Orch.	As Midland Reg.
AFTERNOON	Cinema Orch. Abbey Evensong B.B.C. Dance Orch.	As North Reg. As North Reg. As National	As North Reg. As North Reg.	Studio Orchestra Hotel Orchestra As National
1ST EVENING PROGRAMME	German Talk Welsh Concert	As North Reg. Vaudeville	Military Band As London Reg.	Studio Orchestra As London Reg.
2ND EVENING PROGRAMME	Orchestral Con. Dance Music	Chamber Music Dance Music	Dance Band As London Reg. (till 11 p.m.)	Military Band As London Reg.

FRIDAY, APRIL 15

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Orch.	As Midland Reg.	Cinema Organ	As Midland Reg.
AFTERNOON	Organ Recital Gram. Records Hotel Orchestra	As North Reg. As North Reg. As National	As North Reg. As North Reg.	Cinema Orch. Studio Orchestra As National
1ST EVENING PROGRAMME	Talks Song and Pfte. Recital	As North Reg. Orchestral Con.	Cinema Orch. Walter de la Mare Recital	Band Concert "Critic on the Ether"
2ND EVENING PROGRAMME	Play Dance Music	Gram. Records. Dance Music	Light Orch. Con. As London Reg. (till 11 p.m.)	Studio Orchestra As London Reg.

SATURDAY, APRIL 16

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Organ	As National		As National
AFTERNOON	Cinema Orch. Light Music	As National As National	Dance Music	As National As National
1ST EVENING PROGRAMME	Talks Vaudeville	Lewes Musical Festival Military Band	"Rhythm" (gram.) Studio Orchestra	As London Reg. Mus. Com. Prog.
2ND EVENING PROGRAMME	Orchestral Con. Dance Music	Play Dance Music	As London Reg. As London Reg. (till 11 p.m.)	As London Reg. As London Reg.

PROGRAMMES FOR SUNDAY (March 27)

PRINCIPAL EVENTS

SERVICES AND SACRED MUSIC

5.0 a.m. Langenberg: Easter Festival.
7.10 „ Huizen: Carillon and brass instruments.
9.0 „ Warsaw: High Mass from Cracow.
9.30 „ Strasbourg: High Mass from the Cathedral, celebrated by the Bishop of Strasbourg.
9.40 „ Huizen: High Mass.
10.30 „ Leipzig and all German Stations: Church Cantata for Easter Sunday, "Der Himmel lacht," (Bach).
12 noon. Radio-Paris: The Rev. Father Lhande.

SYMPHONY CONCERTS

8.50 a.m. Vienna: Conducted by Robert Heger.
10.30 „ Budapest: Conducted by Dohnanyi.
1.30 p.m. Stockholm: Conducted by Talich.
4.0 „ Rome: Conducted by Molinari, from the Augusteo.
6.0 „ Most German Stations: American Music, conducted by Walter Damrosch, relayed from New York.
7.50 „ Palermo, etc.
8.0 „ Brussels No. 2.

CONCERTS (Vocal and Instrumental)

6.0 a.m. Hamburg and other German Stations: Harbour Concert from Bremen.
11.15 „ Copenhagen: Relay from Langenberg.
5.30 p.m. Schweizerischer Landessender: Introduction to Sacred a Capella Singing.
7.0 „ Frankfurt: The Radio Orchestra. (Amar, Violin).
8.45 „ Radio-Paris: Light programme.

OPERAS AND OPERETTA

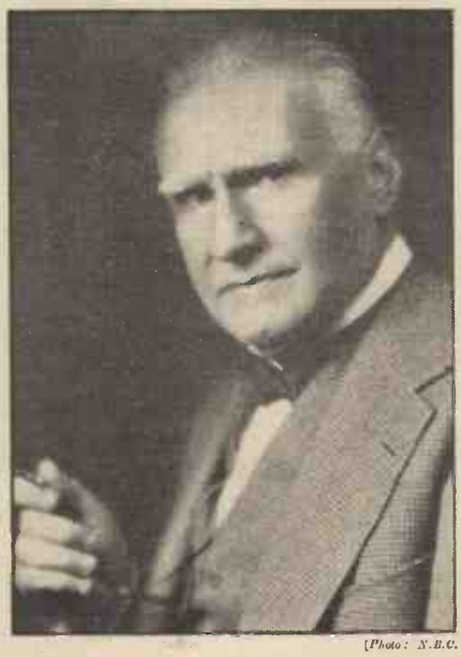
6.15 p.m. Vienna: "The Blue Mazurka" (Lehár).
8.0 „ Ital. (N.) Opera relay.

PLAY

7.10 p.m. Copenhagen: "Brand" (Ibsen).

German Stations To Hear New York

This evening KÖNIGS WUSTERHAUSEN and other stations are to relay from New York part of a concert of American music conducted by Dr. Walter Damrosch. The third member of his family to devote his gifts to the music of New York, Dr. Damrosch has been conducting there since 1884, both at the Metropolitan and in the principal concerts. In 1894 he organised an opera company of his own, and in 1904 he reorganized the New York Symphony Society, which he has conducted since then.



[Photo: N.B.C.

Walter Damrosch

The Heavens Laugh

To-day, Easter Sunday, LEIPZIG AND ALL GERMAN STATIONS are broadcasting a Bach *Church Cantata*, taking up again a pious task which has been interrupted for a time. The Cantata chosen is one which Bach wrote for that particular Sunday in the Church year: they were all composed specially for the day on which they were to form part of the service, and, with only few exceptions, each is closely related to the hymns and the gospel for the day. Many of them are based on the appointed hymns (or chorals) and often use part of the actual words of the gospel. Leipzig has always realised the importance of that, singing the Cantatas, whenever possible, on the Sundays for which Bach originally designed them; for this occasion No. 31 has been chosen, one of the two for Easter which have come down to us, setting forth the gladness of the Church's most joyous Festival in Bach's whole-hearted way. It is laid out for an exceptionally full orchestra, and he has given us a splendid prelude: in it, and in the big opening chours, in five parts, we can indeed hear the heavens laugh and the earth rejoice. That is followed by recitatives and arias for bass, tenor and soprano in turn, and the Cantata is rounded off by the Choral, in which the orchestra soars above the voices with exultant effect. The Thomanerchor and the Gewandhaus orchestra join forces to present it, and the conductor is Professor Straube, the present holder of Bach's old post as Cantor at St. Thomas's, and one of the greatest organists of our time. The Cantata begins at 10.30 (Greenwich time), not, as when Bach himself conducted it, about 7.45 in the morning. The service, of which it formed part in his day, began at 7.00, summer or winter, and lasted till midday: he and his choir had to be in their places again at 1.45 for vespers—no day of rest for him! To-morrow all German Stations are to broadcast the Cantata for Easter Monday.

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.30—10.45 *a.m.*—Time Signal (Greenwich), Shipping Forecast.
11.0 a.m.—12.10 p.m. (approx.)—Easter Day Service from Liverpool Cathedral.
3.0—Time Signal (Greenwich).
3.0—French Music. The B.B.C. Orchestra (Section E), conducted by Victor Hely-Hutchinson.
4.0—"What is a Saint?"—X. St. Camillus de Lellis. By the Rev. Father C. C. Martindale.
4.15—The Band of H.M. Grenadier Guards. Director of Music, Capt. G. Miller. Quick March, Old Comrades (Teike). Fantasy on the Valkyrie (Wagner, arr. Seidl). Leslie Holmes (Baritone): Songs. Band: Ballet Music (La Source) (Delibes). Cornet Duet, Leslie Holmes: Songs. Band: Serenade (Pierné). Intermezzo, Naila (Delibes). Three Quotations (Sousa).
5.30—A Recital by Lionel Tertis.
6.0—6.15—For the Children.
8.0—A Religious Service. From All Saints' Church, Southbourne, Bournemouth.
8.45—The Week's Good Cause. Appeal on behalf of The Pioneer Health Centre by Dr. G. Scott Williamson, M.C., M.D., Ch.B., a Medical Director of the Centre.
8.50—"The News."
9.0—Time Signal (Greenwich).
9.5—The Bournemouth Municipal Orchestra. Conductor, Sir Dan Godfrey. Overture, Mignon (Ambroise Thomas). The Rustle of Spring (Sinding). Serenata (Toselli). Thea Philips (Soprano) and Orchestra: Aria, Softly sighs (Der Freischütz) (The Marksman) (Weber). Orchestra: Popular Selection of Schubert's Melodies (arr. Finck). Horace Stevens (Baritone) and Orchestra: Aria, The Trumpet shall sound (Messiah) (Händel). Orchestra: Humoresque (Dvorák). Waltz, Artist's Life (Strauss). Selection, More Melodious Melodies (Finck).
10.30—Epilogue.

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

11.0 *a.m.*—12.10 *p.m.* (approx.)—(London and Northern)—Daventry National Programme.
3.0 (London)—French Music. The B.B.C. Orchestra (Section E). Conducted by Victor Hely-Hutchinson.
3.0 (Midland)—The Birmingham Military Band, conducted by W. Arthur Clarke. Peter Howard (Baritone). Charles Woodford (Violoncello).
3.0 (Northern)—The Horwich R.M.I. Band, conducted by W. Wood. The Briercliffe Glee Union.
4.0 (London)—The Victor Olof Sextet. Rispah Goodacre (Contralto).
4.30 (Midland)—A Chopin Recital by David Branson (Pianoforte).
4.30 (Northern)—A Violin Recital by Henry Holst.
5.0—5.30—"The Modern Dilemma"—XXIV. Mr. T. S. Eliot. (Last of Series.)
8.0—Daventry National Programme.
8.50—"The News." Weather Forecast, General News Bulletin; Regional News
9.5—Sunday Orchestral Concerts—XXII. Mendelssohn's Hymn of Praise. A Symphonic Cantata. The Words from the Holy Scripture. Isobel Baillie (Soprano). Frank Titterton (Tenor). The Wireless Chorus. The B.B.C Orchestra (Section D) (Leader, Arthur Catterall). Conductor, Adrian Boult. I. Symphony. II. Chorus, All men, all things. Soprano and Chorus, Praise thou the Lord. III. Recitative and Aria (Tenor), Sing ye Praise, He Counteth all your sorrows. IV. Chorus, All ye that cried unto the Lord. V. Duet for two Sopranos and Chorus, I waited for the Lord. VI. Tenor Solo, The sorrows of death. VII. Chorus, The night is departing. VIII. Choral, Let all men praise the Lord. IX. Duet for Soprano and Tenor, My song shall always be Thy mercy. X. Chorus, Ye nations, offer to the Lord.

The Frequencies and Wavelengths given in the following programmes are those published by the stations in question. For more accurate measurements, readers are referred to our Table of Frequencies and Wavelengths.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.
7.30—8.30 *a.m.*—Topical Review. 11.0—Chimes and Weather. 11.15—Concert by the Municipal Band conducted by Lamote de Grignon, relayed from the Palacio de Bellas Artes. 1.0 *p.m.*—Light Music on Gramophone Records.
1.30—*Sextet Concert.* Selection from "Rienzi" (Wagner). Abendlied (Schumann). Serenade (d'Ambrosio). Ich liebe dich (Grieg). 2.0—Theatre Notes, Variety Music on Gramophone Records and Cinema Notes. 2.20—Sextet Concert (continued). Music by Spanish Composers. 3.0—Programme for Hospitals and Benevolent Institutions, with Gramophone Records. 4.0—5.30 Interval. 5.30—Gramophone Records of Popular Music.
6.0—*Concert of Light Music.* March, Fanfaretta (Oudshoorn). Selection from "Los Borrachos" (Vives). Waltz, Une nuit d'amour (Van de Velde). Interlude (Chausson). 6.30—Recital of Argentine Songs by Pili Cañete. 7.0—Agricultural Talk in Catalan.
7.10—*Concert by the Station Orchestra*, with Maximo Barrientos (Tenor). Overture, "Orpheus in the Underworld" (Offenbach). Tenor Solos: (*a*) A orillas de Granada (Martin), (*b*) El punteado (Granados). Tarde de verano en la terraza (Turina). Tenor Solos: (*a*) Song from "L'elisir d'amore" (Donizetti), (*b*) Song from "La Dolores" (Breton). Pavana (Pedrell).
8.0—Programme of Dance Music by the Melody Boys, relayed from the Excelsior Dance Hall. 9.0—Request Gramophone Concert followed by Talk on Chess. 11.0 (approx)—Close Down.

BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW.
Transmits at intervals from 8.55 a.m. 6.0 *p.m.*—Recital of National Songs by Herr Bosko Nikolic.
6.30—*Concert by the Station Orchestra.* Overture, "Maritana" (Wallace). Selection from "Cavalleria Rusticana" (Mascagni). Waltz from "Frasquita" (Lehár). 7.10—Song Recital by Pia Igirosanu of the Opera House, Bucharest.
6.40—*Whistling Recital.* You are my Heart's Delight (Lehar). Zwei Herzen im 3/4 Takt (Stolz). Selection from "The Bird Fancier" (Zeller). 7.55—Topical Talk.
8.25—*Concert of Popular Music by a Military Band.* Overture, "Oberon" (Weber). Morana (Gotovac). Song (Binicki). Serbian Dance (Urban). Humoresque (Dvorak). Overture, "Les Dragons de Villars" (Maillart). Potpourri (Pahor). Selection from "Werther" (Massenet). Potpourri (Leopold). Waltz from "The Swan Lake" (Tchaikovsky). In the interval, News and Sports Notes. After the Programme, Dance Music relayed from the Ruski Car Restaurant.

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.
Transmits at intervals from 5.45 a.m. (*Witzleben* Relay).
10.30 a.m.—See Leipzig. 11.15—See *Langenberg.* 1.0 *p.m.*—Reading. 1.30—"Easter in Music"—Talk, with Gramophone Illustrations. 2.0—Talk: The Religious and the Secular Easter Play. 2.25—See *Breslau.* 3.0—See *Berlin* (*Witzleben*). 5.5—See *Munich.*
6.0—Concert conducted by Walter Damrosch, relayed from New York (See *Hamburg.*)
6.30—See Vienna. 8.45—Sports Notes. 9.0—News Bulletin, followed by Concert from *Berlin* (*Witzleben*).

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW.
Transmits at intervals from 5.45 a.m. (Gymnastics and Hamburg Relay).
10.30 a.m.—See Leipzig. 11.10—Reading of Prose. 11.25—Concert from *Langenberg.* 1.0 *p.m.*—Reading of Prose. 1.30—Vocal and Instrumental Concert by Käthe Aschaffenburg (Pianoforte), Agnes Jambor (Pianoforte), and Maria Oertel (Soprano). 2.30—Relay of the Easter Prize from the Olympia Cycling Race Track.
3.0—*Concert of Light Music.* Overture, "The Bohemian Girl" (Balfe). Waltz, Delirien (Josef Strauss). Selection from "La Tosca" (Puccini). Spanish Suite (Steiner). Madrigal (Simonetti). Spieluhr und Puppentanz (Schebeck). Overture, "Erlenhügel" (Kuhlau). Three Selections (Grieg): (*a*) In the Hall of the Mountain King, (*b*) Brautraub, (*c*) Stürmischer Abend an der Küste. Selection from "Die Puppenfee" (Bayer). Suite, Russia (Carabella). Waltz, Roses of the South (Johann Strauss).
5.0—"*Pünktchen und Anton*"—after the Children's Story by Erich Kästner (arranged for the Radio by Gerd Fricke). 6.0—Gramophone Records of Famous Artists and Ensembles. 6.50—Sports Notes.
7.0—Orchestral Concert relayed from the Philharmonie. Conductor: Professor Julius Prüwer. Overture, "Anacreon" (Cherubini). Three Ballet Pieces (Rameau, arranged Mottl). Violin Solos: (*a*) Melody (Gluck), (*b*) Sicilienne et Rigaudon (Francoeur-Kreisler). Scherzo from "A Midsummer Night's Dream" (Mendelssohn). Suite from "Carmen" (Bizet). Overture, Im Frühling (Goldmark). Legend, Zorahayda (Svendsen). Entr'acte from "Mignon" (Thomas). Hungarian Rhapsody No. 6 (Liszt). 8.0 (in an interval)—Sports Notes.
9.0—News Bulletin, followed by *Concert of Orchestral Suites by the German Symphony Orchestra*, conducted by Ernst Ewald Gebert. Ballet Suite, Sylvia (Delibes). Scènes pittoresques (Massenet). Jeux d'enfants (Bizet). Suite, Chopiniana (Glazounoff). Dance Suite from "The Bartered Bride" (Smetana).

SUNDAY continued

BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW.
12 *noon*—Concert relayed from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 2.0—Relay from *Paris* (*Ecole Supérieure*), or Relay of a Local Festival. 4.30—Pasdeloup Symphony Concert relayed from the Théatre des Champs Elysées. 6.20—Sports Notes. 7.30—Radio Journal. 8.0—A Review. 8.10—Lottery Results. 8.30—Concert of Light Music on Gramophone Records.
9.0—Light and Classical Music on Gramophone Records. 9.45—Concert of Operetta Music. After the programme—Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).
Transmits at intervals from **6.0 a.m. (Hamburg Relay).**
10.30 a.m.—See *Leipzig*. 11.15—See *Langenberg*.
1.0 *p.m.*—Announcements. 1.10—Talk: The Aquarium. 1.20—Talk: Humanity in the Care of the Sick. 2.20—Programme for Children. 3.0—See *Berlin* (*Witzleben*). 4.25—Easter in Song throughout the Ages—Recital by Paul Losse (Baritone). 5.0—"Easter"—a Survey by Rudolf Mirbt. 5.50—Weather for Farmers, followed by Sports Notes.
6.0—Concert conducted by Walter Damrosch, relayed from New York (See *Hamburg*). 6.30—Weather Forecast, followed by Talk: Over Three Continents in an Aeroplane.
7.0—Variety Programme under the direction of Herbert Brunar. 9.0—Time and News. 9.30—Concert from *Berlin* (*Witlzeben*). 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 1)

N.I.R. 590 kc/s (509 m.); 15 kW.
12.15 *p.m.*—1.45—Weather Forecast, followed by *Gramophone Concert*. Marche militaire (Schubert). Prelude to "Khovantschina" (Rimsky-Korsakoff). Aria from "Werther" (Massenet). Aria from "Lakmé" (Delibes). La Valse du Tyrol (Guerin-Brabant). Two Selections (St. Servan); (*a*) Tyrolienne printanière, (*b*) Ma Bergère. Selection from "Là-haut" (Yvain). Le rêve passe (Helmer-Krier). Ce que c'est qu'un drapeau (Mareille-Dupont). Joey the Clown (Myers). Rio de Janiero (De Credos). Waltz, Variations (Paulin). The Mountain Gnomes (Eilenberg). Träumerei (Schumann). Adagio (Bach-Weiner). The Clock is playing (Blaauw). Bohemian Song (Boldi-Nussbaum). Caravane Tzigane. Popular Russian Songs. Valse joyeuse (Fermont and Acker). Polka, Concert sous bois (Colas). Le Cygne (Saint-Saëns). Simple aveu (Thomé). Potpourri of Operetta Waltzes (Prentice).
5.0—Concert by the Station Orchestra, conducted by Jean Kumps. Overture, "The Marriage of Figaro" (Mozart). Le Festin de l'Araignée (Roussel). Serenade for Strings (Pierné). Canzonetta for Harpsichord and Orchestra (Pierné). The Unfinished Symphony (Schubert). Two Selections (Debussy): (*a*) Cortège, (*b*) Golliwog's Cake Walk.
6.0—*Gramophone Concert*. Suite, The Birds (Respighi). Habanera (Chabrier). Two Selections (Verdi); (*a*) Miserere, from Il Trovatore, (*b*) Aria from Aïda. Pizzicati, Gouttes de pluie (de la Rivière). Fairy Ballet (White). Selections (Massenet): (*a*) Ouvre tes jolis yeux, (*b*) Noël Païen, (*c*) Entr'acte, Minuet and Ballet Music from "Manon." Cavatina from "Prince Igor" (Borodine). Ballet Music from "Marouf" (Rabaud).
7.15—Religious Address. 7.30—Le Journal Parlé.
8.0—The Dance of the Dragonflies — Operetta (Lehár), relayed from the French Opera House, Antwerp. In the first interval—Easter Readings. In the second interval—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.
12.15 *p.m.*—Weather Forecast, followed by Classical Music on Gramophone Records.
5.0—*Concert by the Station Orchestra, conducted by M. Jean Kumps*. Overture, "The Marriage of Figaro" (Mozart). Le Festin de l'Araignée (Roussel). Serenade (Pierné). Canzonetta (Pierné). Unfinished Symphony (Schubert). Cortège (Debussy). Golliwog's Cake Walk (Debussy).
6.0—Popular Music on Gramophone Records. 7.15—Religious Talk. 7.30—Le Journal Parlé.
8.0—Concert by the Station Orchestra. Overture, "Fidelio" (Beethoven). Violin Solo by Melin: Concerto (Brahms). 8.45—A Sketch (De Lattin). 9.0—*Concert* (*contd.*)—Ballet, Les Biches (Poulen). Prelude and Dances from "La Victoire" (Albert Dupuis). Ballet Music from "Cydalyse" (Pierné). 10.0—Le Journal Parlé and Close Down.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.
9.15 *a.m.*—Programme for Children. 9.30—Recital of Sacred Music. 9.45—Religious Reading. 10.0—Orchestral Concert. 11.0—Light Music on Gramophone Records. 11.45—News and Time Signal.
12 *noon*—Popular Music on Gramophone Records.
3.0 *p.m.*—Agricultural Talk. 4.0—Light Music and Romanian Music by the Jean Marco Orchestra. 5.0—News and Time Signal. 5.10—Concert by the Jean Marco Orchestra (continued). 6.0—Talk on Education and Health. 6.40—Light Music on Gramophone Records.
7.0—Opera (to be announced). In the interval—News Bulletin.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW.
8.0 *a.m.*—Reform Church Service. 9.0—Sacred Music and Sermon relayed from a Church.
10.30—Evangelical Service, followed by **Concert by the Orchestra of the Royal Hungarian Opera House,** conducted by **Ernst** Dohnányi. Soloist: Alexander Svéd (Vocalist). Selection from "The Caliph of Bagdad" (Boieldieu). Vocal Solo: Prologue from "I Pagliacci" (Leoncavallo). Suite from "Pierrette's Veil" (Dohnányi). Vocal Solos: (*a*) Aria from "Eugen Onegin" (Tchaikovsky). (*b*) Credo from "Othello" (Verdi). Symphony No. 1 (Beethoven). Talk in the interval.
1.0 *p.m.*—Concert of Popular Music on Gramophone Records. 2.0—Agricultural Talk. 2.45—Educational Programme. 4.0—Recital of Hungarian Folk Music by Josef Cseléyin, accompanied by the Imre Magyari Cigány Band. 5.10—Talk by Lajos Perlaky.
5.30—"The Growth of the Operetta—III. Operettas by Johann Strauss. Concert by the Orchestra of the Royal Hungarian Opera House, conducted by Béla Nagypál. Soloists: Gizi Kármán and Nikolaus Szedö. Two Arias from "Die Fledermaus." Selections from "Ali Baba and the Forty Thieves." Selections from "Der lustiger Krieg." Selections from "A Night in Venice." Aria from "The Queen's Kerchief." Two Arias from "The Gipsy Baron." Overture to "Cagliostro in Vienna."
7.0—"Das alte Orfeum"—Revue-Operetta in Two Acts and Twenty-six Scenes (Bekeffy and Farago). Music after motives by Lajos Lajtai. 9.0—News and Concert by the Joska Radics Cigány Band, from the Hotel Jägerhorn.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.
See *Langenberg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).
7.0 *a.m.* Recital of Easter Hymns. 7.30—Gymnastics. 7.45—8.30—Recital of Catholic Church Music. 9.0—Divine Service from the Garrison Church. 10.30—Weather and News. 11.15—See *Langenberg*.
1.30 *p.m.*—Programme for Children.
2.0—*Concert by the Radio Orchestra, conducted by Launy Gröndahl and a Choir, conducted by Julius Foss*. Choral Selections: (*a*) Krist stod op af Döde, (*b*) Stabat mater dolorosa (Giovanni Maria Nanini). (*c*) Jucundare iugiter, and (*d*) Victimae paschali laudes (Mogens Pedersön). Ballet Music from "Les petits riens" (Mozart). Minuet for Strings from "Berenice" (Händel). Overture in B Flat Major (Schubert). Choral Selections: (*a*) Singet dem Herrn ein neues Lied (Hans Leo Hassler), (*b*) Bort I Sorgens Skygger (Crüger), (*c*) Cedit hymnus eminus. Concert Overture, Nachklänge aus Ossian (Gade). Waltz from "Et Folkesagn" (Gade). Selection from "Der Freischütz" (Weber). Selection from the Music to "St. Swithin's Day" (Hartmann). Dance from "Little Christie" (Hartmann). Overture, "Norma" (Bellini).
4.0—Divine Service from the Elijah Church. 5.20—Reading: "Our Daily Bread"—Slang and Anecdotes. 5.50—Weather Forecast. 6.0—News Bulletin. 6.15—Time Signal and Sports Notes. 6.30—Talk: Easter in Philology and Cultural History. 7.0—Town Hall Chimes.
7.2—Prelude to "Brand" (Ture Rangström) by the Radio Orchestra, conducted by Emil Reesen. **7.10—"Brand"—Tragedy in Five Acts in Verse (Ibsen)** (arranged for Radio).
9.20—*Concert of Scandinavian Music, by the Radio Orchestra*, conducted by Emil Reesen. Fest-Polonaise (Svendsen). Norwegian Folk Melody, arranged for Strings by Halvorsen. Norwegian Dance, No. 2, in A Major (Grieg). Resignation (Neupert), arranged for Orchestra by Grieg. Norwegian Rhapsody, No. 2, in A Major (Svendsen). 10.0 (approx.)—Close Down.

CRACOW (Poland)

959 kc/s (312.8 m.); 1.5 kW.
9.0 *a.m.*—Divine Service, relayed from *Wilno*, 533 kc/s (563 m.). 10.58—Time Signal, Bugle Call from the Tower of St. Mary's Church, Programme Announcements and Weather Forecast. 11.15—Light Music on Gramophone Records. 11.35—See *Warsaw*.
12.15 *p.m.*—Interval. 3.0—See *Warsaw*. 4.0—Popular Music on Gramophone Records. 5.0—Programme for Children relayed from *Wilno*, 533 kc/s (563 m.). 5.30—See *Warsaw*. 6.0—Concert of Light Music. 7.30—See *Warsaw*. 8.45—Literary Talk. 9.0—Light Music and Dance Music on Gramophone Records. 11.0 (approx.)—Close Down.

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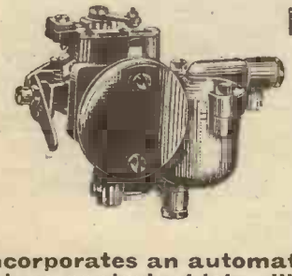

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DUBLIN (Ireland)

2RN. 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).
8.30 *p.m.*—Time Signal. 8.31—Vocal and Instrumental Concert. 11.0—Time Signal, News, Weather Report and Close Down.

FÉCAMP (France)

Radio Normandie. 1,364 kc/s (219.9 m.); 1 kW.
Transmits at intervals from 10 a.m.
6.0 *p.m.*—Concert of Variety Music. 8.0—Orchestral Concert. 9.0—Concert of Light Music.
12.30 *a.m.* (*Monday*)—Dance Music. 3.0 (approx.)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.).
Transmits at intervals from 6.0 a.m. (Hamburg Harbour Concert).
10.0 *a.m.*—Max Zodykoff Programme. A Voice out of the Darkness—Short Prose Works of a Man blind from Birth. Reader: Otto Bernstein. **10.30—National Transmission relayed from Leipzig.** 11.10—Orchestral Concert. 12.50 *p.m.*—Rural Programme—Talk: Amateur Theatricals in the Country. After the Talk, "*Das Apostelspiel*"—Short Play (Max Mell). 2.0—Programme for Children.
3.0—*Orchestral Concert* from the Kurhaus, *Wiesbaden*. Conductor: Hermann Irmer. March (Gounod). Easter Overture (Rimsky-Korsakoff). Suite (Gluck-Mottl). Fantasia on the Works of Mendelssohn (Dupont). Ave im Kloster (Kienzl). Overture, "The Gipsy Baron" (Johann Strauss). Selection from "The Land of Smiles" (Lehár). March, Per Rundfunk (Probst). 5.0—Educational Talk. 5.25—Thirty Minutes of Variety conducted by Falke-Leonhardt. 5.55—"*The Stronger*"—a Scene (Strindberg). 6.20—Weather and Sports Notes. 6.30—Selma Lagerlöf Programme.
7.0—Vocal and Orchestral Concert, conducted by Hans Rosbaud. Soloists: Gotthold Ditter (Baritone), Licco Amar (Violin), and Members of the Union Folk Choir: Part I. Overture, "The Templar and the Jewess" (Marschner-Pfitzner). Concerto in E Minor for Violin and Orchestra, Op. 64 (Mendelssohn). Overture, "Der Freischütz" (Weber), Part II. Wagner Programme. Overture, "Die Feen." Second Scene from Act I of "The Flying Dutchman," Prelude and Selection from "Lohengrin." Three Selections from "Parsifal." Hans Sachs' Monologue from "The Mastersingers." Five Selections from Act III of "The Mastersingers." 9.20—Time, Weather, News and Sports Notes. 9.40—Orchestral Concert. 11.0 (approx.).—Close Down.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.) and *Kiel*, 1,292 kc/s (232.2 m.).
6.0 a.m. (from Bremen)—Harbour Concert, preceded by Chimes from Bremen Cathedral. 7.30—Time and Weather. 7.35—Easter Morning Concert by the Altona Trombone Choir. 8.0—News Bulletin 8.10—Gymnastics. 8.25 (from Hanover)—Easter Service. 10.30—See Leipzig. 11.10—Time and Weather. 11.15—Concert, conducted by Kurt Barth, relayed from the Deutsche Haus, *Flensburg*. 1.15 *p.m.*—Talk: An Adventure on the Rio Negro. 1.45—Recital of German Chorals in North German Dialect.
2.0—Die zerbrochenen Osterfeier—An Easter Tale (Margot Daniger).
3.0 (from *Bremen*)—*Military Band Concert*, conducted by Georg Voigt. Army March 163 (Redern). Overture, "The Black Domino" (Auber). Selection from "Lohengrin" (Wagner). Variations on a Theme from "Rigoletto" (Verdi). March (Pelz). Waltz from "Zigeunerprimas" (Kálmán). Army March 195 (Piefke). Easter Chimes. Selection from "Il Trovatore" (Verdi). Army March 113.
4.30—Recital of Spring Songs by Berta Taubert (Vocalist) and Karl Heinz Taubert (Pianoforte). 5.0—Reading of a Tale by Dickens.
5.20 (from *Hanover*)—Mandoline Concert.
6.0—Interchange Programme from New York. Concert conducted by Walter Damrosch. Three Virginian Dances (John Powell). The White Peacock (Griffes). Suite for Pianoforte, Hispania (Stoessel).
6.30—Talk: Sailing. 6.40—Sports Notes. 6.55—Weather Forecast.
7.0—Popular Concert conducted by Richard Richter, relayed from the Musikhalle. Overture, Friedensfeier (Reinecke). Four Selections by the Richter Women's Choir: (*a*) Inocentes pro Christo (Palestrina), (*b*) Nonnenlied (Otto Siegl), (*c*) Wir wiegen Jesum (Siegl), (*d*) The Virgin Mary (Verdi). Largo (Händel). First Suite from "Peer Gynt" (Grieg). The First Rhapsody (Liszt). Three Pieces for 'Cello and Harp: (*a*) Serenade (Pierné), (*b*) Minuet (Moth), (*c*) Waltz (Field). Selections from "The Tales of Hoffmann" (Offenbach). Waltz from "Faust" (Gounod). First News in the interval.
9.0—Second News. 9.10—Topical Talk. 9.20—Dance Music from the Trocadero: 10.15—Dance Music from the Boccaccio.

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).
Transmits at intervals from 6.0 a.m. (Hamburg Relay).
10.30 a.m.—See Leipzig.
11.10—*Concert by the Königsberg Opera House Orchestra*, conducted by Werner Richter-Reichhelm. Soloists: Elsa Koch (Soprano) and Agnes Lenbach (Contralto). Overture, "Iphigenia in Aulis" (Gluck). Recitative and Aria for Contralto from "Orpheus and Eurydice" (Gluck). Two Selections from "Orpheus and Eurydice" (Gluck). The Rose Aria from "The Marriage of Figaro" (Mozart). Aria from "The Merry Wives of Windsor" (Nicolai). Overture, "The Merry Wives of Windsor" (Nicolai). Overture, "William Tell" (Rossini). Aria from "Samson and Delilah" (Saint-Saëns). Triumphal March from "Aïda" (Verdi). Duet from "Aïda" (Verdi). Duet from "The Merry Wives of Windsor" (Nicolai). Suite on Motives from "Euryanthe" (Weber).
1.0 *p.m.*—Chess Talk. 1.30 (from *Danzig*)—Talk for Young People. 2.0—Talk: Experiences with Animals. 2.10—A Musical Guessing Competition. 2.25—See *Breslau*. 3.0—Popular Concert. Sports Notes in the intervals. 4.50—Reading: "Das Osterfeuer" (Martin Dey).
5.20—Liebeslieder-Walzer, Op. 52 (Brahms), by Margarethe Albrecht (Soprano), Ludmilla Schirmer (Contralto), Willy Sperber (Tenor), Erwin Kraatz (Bass) and Hans Zippel and Leo Taubmann (Pianists).
6.5—"Easter in East Prussia"—a Radio Sequence. 7.0—Sports Notes. 7.10—Dance Music by the Königsberg Opera House Orchestra, conducted by Georg Wöllner and the Little Orag Orchestra, conducted by Eugen Wilcken. 9.0 till Close Down—See *Berlin* (*Witzleben*).

HILVERSUM (Holland)

160 kc/s (1,875 m.); 8.5 kW. (transmitted from *Huizen*).
7.55—11.40 *a.m.*—Programme of the Workers' Radio Society (V.A.R.A.). 7.55—Gymnastics. 8.10—Esperanto Lesson. 8.35—Football Notes. 8.40—Horticultural Talk.
9.10—Haydn Commemoration—Orchestral Concert, conducted by Hugo de Groot, with Soloists. 9.40—Recitations from the Works of French Socialist Poets. 10.0—Haydn Concert (contd.). 10.40—Address by Heer Zwertbroek. 11.0—Haydn Concert (contd.).
11.40 *a.m.*—3.40 *p.m.*—Programme of the Algemeene Vereeniging Radio Omroep (A.V.R.O.). 11.40—Time Signal, Easter Chimes, and Carillon Recital from St. John's Cathedral, *Bois-le-duc*. 12.10—Concert by the Wireless Orchestra, conducted by Nico Treep. 1.10—Organ Recital by Pierre Palla. 1.40—Talk on Goethe.
2.10—Concert by the Concertgebouw Chamber Orchestra, conducted by Albert van Raalte. Soloists: Di Moorlag (Soprano), George Walter (Tenor). Ferdinand Helmann (Violin), Nicholas Klaassen (Flute) and W. Peddemors (Oboe). Cantata: I know that my Redeemer liveth (Johann Sebastian Bach), for Tenor and Orchestra. Symphony for the Church Cantata, No. 156 (Johann Sebastian Bach) for Oboe and String Orchestra. The Second Symphony for the Easter Oratorio (Johann Sebastian Bach-Gillier-Whittaker), for Violin and String Orchestra. Aria for Soprano, Flute and String Orchestra from the Easter Oratorio (Johann Sebastian Bach). Gramophone Records. Lacrimosa from the

SUNDAY continued

"Requiem" (Mozart). Aria: Nehmt meinen Dank—for Soprano and Orchestra (Mozart). Symphony No. 21 in A Major (Mozart).
3.40—Scenes from "*Henry IV*." and "*The Merry Wives of Windsor*" (Shakespeare). 4.25—Gramophone Records of Light Music, and Sports Notes. 4.40—5.40—V.A.R.A. Programme for Children. 5.40—7.40—Programme of the Liberal Protestant Radio Society (V.P.R.O.). 5.40—Literary Talk. 6.10—Divine Service in the Studio.
7.40 till Close Down—V.A.R.A. Programme. 7.40—Time and News.
7.55—*Concert by the Wireless Orchestra*, conducted by Nico Treep. Soloist: Wittrisch (Vocalist). Overture, "Die Fledermaus" (Strauss). Waltz, Hofballtänze (Lanner). Frauenherz (Strauss). Songs: (*a*) Song from "The Gipsy Baron," (*b*) Two Songs from "A Night in Venice" (Johann Strauss). Overture, "Flotte Bursche" (Suppé). Waltz, Flattergeister (Strauss). Songs (Lehár): (*a*) Volga Song from "The Czarevitch," (*b*) Song from "Frederica," (*c*) Song and You are my Heart's Delight, from "The Land of Smiles." Radetzky March (Strauss).
8.55—Guessing Competition—Pianoforte Solos. 9.15—Gramophone Records of Variety Music. 9.25—Concert of Light Music by Kovacs Lajos and his Orchestra, Marino and Norris (Negro Duettists) and Marcel Wittrisch. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

1,004 kc/s (298.8 m.); 8.5 kW. (transmitted from *Hilversum*).
7.10—9.10 *a.m.*—Programme of the Christian Radio Society (N.C.R.V.).
7.10—Carillon Recital, with Trumpet Sextet Selections and Instrumental Quartets. 8.10—Divine Service.
9.10—4.40 *p.m.*—Programme of the Catholic Radio Society (K.R.O.). 9.10—Gramophone Records of Light Music.
9.40—Mass from St. Joseph's Church, Helmond.
11.55—*Sextet Concert*. Quick Step (v. Lindern). Entr'acte from "Cavalleria Rusticana" (Mascagni). Waltz, Hochzeitsreigen (Lincke). Murmelndes Lüftchen (Jensen). Potpourri, A B C (Komzak). Selection from "Les Millions d'Arlequin" (Drigo). Potpourri, Für alle (Dostal). Lenz (Hildach). Waltz, Moonlight on the Alster (Fetras). Sylphiden (Lincke). Spanish Gipsy Dance (Marquina).
1.10 *p.m.*—Easter Programme with Introductory Talk. Easter Songs and Hymns and Epilogue.
2.20—String Quartet Concert from the Concertgebouw Haydn Programme. Quartet in B Flat Major, No. 13. Quartet in C Major, No. 12. Quartet in D Minor, No. 11.
4.10—Programme for Invalids. 4.40—7.25—N.C.R.V. Programme. 4.40—Gramophone Records of Sacred Music. 5.0—Divine Service from the Wilhelminakerk, *Dordrecht*, followed by Gramophone Records of Sacred Music. 7.25 till Close Down—K.R.O. Programme. 7.25—Talk on Easter.
7.50—*Orchestral Concert*. Soloists: Mlle. Mara Dijxhoorn (Vocalist). Overture in B Major (Schubert). Songs: Suleika I and II (Schubert). The Unfinished Symphony (Schubert). Gramophone Records of Variety Music. Overture, "Il Seraglio" (Mozart). Two Songs from "The Marriage of Figaro" (Mozart). Songs: (*a*) Auf ein altes Bild, and (*b*) In der Frühe (Wolf), (*c*) Chanson triste and (*d*) L'Invitation au voyage (Duparc), (*e*) Le temps des Lilas (Chausson), (*f*) Villanella (Dell'Acqua). Overture, "Phèdre" (Massenet). Suite No. 2 from "L'Arlésienne" (Bizet). Prelude to the Third Act of "The Mastersingers" (Wagner). Selections (Wagner) from (*a*) "Lohengrin," (*b*) "Parsifal." In the interval at 9.10—News.
10.20—Epilogue by the Choir. 10.40 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See *Copenhagen*.

LANGENBERG (Germany.)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
5.0 *a.m.*—Easter Service from the Presbyterian Church, *Cologne-Kalk*. 6.0—See *Hamburg*. 7.30—Lesson in Esperanto. 8.0—Chimes from St. Gereon's Church. 8.5—9.0—Catholic Service. 10.0—Talk: The German Language.
10.30—See *Leipzig*.
11.15—Orchestral Concert conducted by Kuhn. Academic Festival Overture (Brahms). Siegfried's Rhine Journey from "The Twilight of the Gods" (Wagner). Selections (Grieg): (*a*) Abend im Hochgebirge, (*b*) An der Wiege. Dance from "Mascarade" (Nielsen). Ballet Music from "The Prophet" (Meyerbeer). Three Pieces from "The Damnation of Faust" (Berlioz): (*a*) Will o' the Wisp Dance, (*b*) Dance of the Sylphs, (*c*) Hungarian March. Waltz, Krolls Ballklänge (Lumbye). Potpourri, From Vienna across the World (Hruby).
1.30—Talk: Music for Workers. 1.50—Talk: Easter in Greece. 2.25—Talk: Gardens in Cities. 2.45—Masters of Nature Description: "Das Auferstehungsfest der Bienen" (Georg Rendl). 3.5—Talk: The Worker's Leisure Time. 3.30—Relay of a Military Band Concert. 4.50—Talk: The So-called "Occultism." 5.10—Talk by Prof. Friedlander, with Illustrations by Margarethe Roll (Soprano): Goethe and Music.
6.0—Symphony Concert by the Orchestra of the National Broadcasting Company, conducted by Walter Damrosch, relayed from New York. 6.30—Introductory Talk to the 7.5 *p.m.* Transmission. 6.50—Sports Results. **7.5 "Mephistopheles"**—Opera in Four Acts (Boito), relayed from the Municipal Tonhalle, *Düsseldorf*, followed by News and Concert from *Berlin* (*Witzleben*). 11.0 (approx.)—Close Down.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.).
Transmits at intervals from 6.0 a.m.
10.30 a.m.—National Transmission. "Der Himmel lacht, die Erde jubilieret"—Cantata for Easter Sunday (Johann Sebastian Bach) by the Municipal and Gewandhaus Orchestras and the St. Thomas' Choir, conducted by Dr. Karl Straube. Soloists: Grete Welz (Soprano), Hans Lissmann (Tenor), Curt Böhme (Bass), Günther Ramin (Organ), Friedbert Sammler (Cembalo), Herbert Karger (Oboe) and Heinrich Teubig (Trumpet).
11.10—Talk: Thoughts on the Resurrection.
11.40—Concert by the Leipzig Symphony Orchestra conducted by Franz Jung. 1.30 *p.m.*—Reading: "Goethes liebe Kleine" (Kurt Schuder). 2.0—A Sports Relay. 3.0—Mandoline Concert from the Hotel Reichshof, *Heiligenstadt*.
3.30—Concert by the Leipzig Symphony Orchestra, conducted by Hilmar Weber. Mozartiana—Suite No. 4, Op. 61 (Tchaikovsky). Ein Fest in Aranjuez (Demerssemann). Torch Dance No. 3 (Meyerbeer). Oriental Sketches (Mraczek). Waltz, Golden Rain (Waldteufel). March, Soldatenleben (Schmeling).
5.0—Topical Report. 5.30—"*The German Gothamists*"—A Comedy (August von Kotzebue) (arranged for Radio by Hans Peter Schmiedel).
7.0—Concert by the Leipzig Symphony Orchestra, conducted by Theodor Blumer. Soloist: Elizabeth Gerö (Soprano). 9.5—News Bulletin, followed by Dance Music from the Linckesche Bad, *Dresden*. 11.0 (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.
8.30 *a.m.*—Relay of Sacred Music. 9.30—Topical Talk. 10.0—Quartet Concert. 11.0—Time Signal, News and Gramophone Records.
2.15 *p.m.*—Programme for Girls. 2.45—Recital of National Songs. 3.30—Dramatic Programme. 7.0—Symphony Music on Gramophone Records. 8.0—Saxophone Solos. 8.30—Song Recital. 9.0—Time and News Bulletin. 9.15—Light Music.

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.
10.0 *a.m.*—Divine Service from the Ostro Brama, *Wilno*, 533 kc/s (563 m.). 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—See *Warsaw*. 11.15—Light Music on Gramophone Records. 11.35—See *Warsaw*. 4.0—Programme for the Sick. 4.15—Popular Music on Gramophone Records and Topical Talk. 5.0—Programme for Children relayed from *Wilno*. 5.30—See *Warsaw*. 9.0—Humorous Talk. 9.15—See *Warsaw*. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW.
8.0 *a.m.*—Parisian Press Review relayed from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 12 *noon*—Relay from *Paris* (*Ecole Supérieure*). 2.30 *p.m.*—Orchestral Concert. 4.30—Pasdeloup Concert. 8.0—Relay from *Paris* (*Ecole Supérieure*).

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.
8.0—9.30 *a.m.*—Topical Review.
2.0 *p.m.*—Chimes, Time, Theatre Guide and *Concert by the Station Sextet*. Overture, "Alceste" (Gluck). Selection from "El húsar de la Guardia" (Jiménez). Selection from "La Traviata" (Verdi). Selection from "Philémon and Baucis" (Gounod). The Unfinished Symphony (Schubert). In a Persian Market (Ketelbey).
3.30—Interval. 7.0—Chimes and Request Concert of Gramophone Records. 8.30—Interval.
9.30—Chimes, Time Signal and *Concert of Military Music*. Selection from "Maruxa" (Vives). Gigantes y Cabezudos (Caballero). Selection from "Las Golondrinas" (Usandizaga). Selection from "Curro Vargas" (Chapi). March (Luna); followed by Talk and *Song Recital* by Marcelle Schveizer (Soprano). Serenade (Schubert). Gretchen am Spinnrade (Schubert). Nana (Falla). Spring (Rachmaninoff). Selection (Rachmaninoff). Ma Poupée Chérie (Déodat de Sévérac).
11.30—Dance Music. 12 *midnight*—Chimes and Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*

MOSCOW (Russia)

Trades Union. 230.1 kc/s (1,304 m.); 100 kW.
Transmits at intervals from 4.0 a.m.
9.0 *a.m.*—Concert for Workers. 10.0—Peasants' Radio Journal. 11.0—Literary Programme. 11.30—Theatre, Music and Cinema Review. 1.30 *p.m.*—Recreative Programme for Schools. 1.45—Weather Forecast. 2.0—Agricultural Report. 2.20—Talk (to be announced). 2.55—Time Signal. 3.0—Proletariat Radio Journal. 4.0—Peasants' Radio Journal. 5.0—Appeal. 7.0—Political Talks in German and *English*. 8.55—Time Signal. 9.0 (approx.)—Close Down.

MUNICH (Germany)

563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.), and *Nürnberg*, 1,256 kc/s (239 m.).
Transmits at intervals from 9.0 a.m.
10.30 *a.m.*—See *Leipzig*. 11.10 (from *Nürnberg*)—Wind Instrument Concert relayed from the Melanchthonplatz.
12.5 *p.m.*—Time, Weather and Programme Announcements. 12.15 (from *Nürnberg*)—Agricultural Talk. 12.35—Pictures of Nature—Gramophone Concert. 1.30—Talk on Chess. 2.15—Punch and Judy Show for Children. 2.35—Vocal and Pianoforte Recital. 3.10—Talk: A Wedding in Tetuan.
3.30—"*A Zoological Sequence*" (arranged by Konrad Scherber) by the Radio Orchestra. 4.45—Topical Talk.
5.5—"*The Eternal Garden*"—A Sequence from Spring to Spring, by Edith Schulze-Westrum, Herbert Franz (Speaker), Hans Erich Witt (Tenor) and Richard Staab (Pianoforte).
6.0—Concert conducted by Walter Damrosch, relayed from New York. (See Hamburg.) 6.30—A Dialogue: The Wrong Use of Expressions. 6.50—Weather and Sports Notes.
7.5—Concert relayed from the Tonhalle. The Munich Philharmonic Orchestra conducted by Willy Haenel-Christiansen, with Erik Wildhagen (Baritone), Adolf Hempel (Organ) and Katerina Holl (Harp). 10.0—News, followed by Concert from the Café Stad Wien. 11.0 (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.); *Porsgrund*, 662 kc/s (453.2 m.) and *Rjukan*, 671 kc/s (447.1 m.).
9.20 *a.m.*—Chimes. 9.30—Divine Service, relayed from St. Saviour's Church. 4.0—*Concert of Sacred Music* by

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the Station Orchestra, conducted by Hugo Kramm. Easter Hymn (Ottar Eggen). Overture to the Oratoria, "St. Paul" (Mendelssohn). From Bethlehem to Golgatha (Kling). Maria Wiegenlied (Max Reger). Andante religioso (Thomé). Selection from "The Messiah" (Handel). In an Old Convent Garden (Alf. Hurum). At the Altar (Sinigaglia). Easter Overture (Rimsky-Korsakoff). 5.15—Talk: Jörgen. 5.45—Weather and News Bulletin.

6.0—Orchestral Concert by the Harmonic Society, conducted by Harald Heide. Soloist: Mme. Carin Edelberg (Vocalist). Overture, "Lohengrin" (Wagner). Selection from "Tannhäuser" (Wagner). Rêverie (Vieuxtemps). Two Solos with Pianoforte accompaniment: (*a*) Wir preisen Dich Gott in der Höhe (Sgambati), (*b*) Legend of St. Olave (Haarklou).

7.0—Time Signal. 7.15—Talk and Concert by the Fredriksstad Music Society and Choir, conducted by Sev. Svensen. 9.0—Weather and News Bulletin. 9.15—Topical Talk.

9.30—Choral Concert. 10.0 (approx.)—Close Down.

PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW. Transmits at intervals from 9.40 a.m. 4.30 *p.m.*—Light Music and Dance Music, relayed from the Olympia Tea Rooms. Sports Notes in the Intervals. 7.0—Giornale Radio and Announcements. 7.20—Sports Notes. 7.25—Light Music on Gramophone Records. 7.45—Time Signal and Announcements.

7.50—Symphony Concert, conducted by La Rosa Parodi. The Unfinished Symphony (Schubert). Overture, "Coriolanus" (Beethoven). Talk: The Palermo of To-day. Overture, Easter (Rimsky-Korsakoff). Symphonic Poem. En Saga (Sibelius). Selections from "Le Donne Curiose" (Wolf-Ferrari). After the Concert, Theatre Notes and Variety Songs. 9.55—Late News Bulletin.

PARIS (France)

(EiffelTower). Call FLE. 207.5 kc/s (1,445.7 m.); 13 kW. Time Signals (on 2,560 m.) at 9.26 a.m. and 10.26 p.m. (preliminary and 6-dot Signals).

12.30 *p.m.*—Symphony Concert, conducted by Edouard Flament. In the interval at 1.0—News. 5.45—Le Journal Parlé. 6.45—Programme for Children. 7.20—Weather Report. 7.30—Gramophone Concert of Light and Classical Music.

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.

12 *noon*—Gramophone Records, News Bulletin and Announcements. 12.15 *p.m.*—Light Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Gramophone Records, Talks and News. 7.30—Light Music on Gramophone Records. 8.30—Gramophone Records, Talk and News.

8.45—*Vocal and Orchestral Concert.* Overture, "Der Freischütz" (Weber). Ballad No. 1 (Brahms). Selections from "Scènes Alsaciennes" (Massenet): (*a*) Dimanche Matin, (*b*) Au cabaret, (*c*) Sous les Tilleuls, (*d*) Dimanche Soir. Scherzo-Valse (Chabrier). Intermezzo (Moussorgsky). Ballet Music from "Romeo and Juliet" (Gounod). Kaiserwalzer (Joh. Strauss).

10.45—News Bulletin. 10.50 (approx.)—Close Down.

PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.

7.45 *a.m.*—Variety Music on Gramophone Records. 8.0—News, Weather and Press Review. 8.30—Physical Culture Lesson. 10.0—Agricultural Report, Market Prices, News and Weather.

10.20—*Gramophone Concert.* Selection from "Le Petit Duc" (Lecocq). Souvenir for Violin (Drdla). Rigaudon for Clarinet (Lacôme). Bonsoir Madame la Lune (Marinier). Extase (Ganne). Selection from "Rose Marie" (Friml). Les Lilas (Doelle). Ay! Ay! Ay! (Freire).

11.0—Concert. 11.30—Variety Music on Gramophone Records. **12 noon—Religious Address by the Reverend Father Lhande.**

12.20 *p.m.*—*Sacred Music.* Fugue in E Minor (Bach). Laudate Dominum (Mozart). Ave Verum (Mozart).

12.30—Bilboquet as a Groom.

12.45—Press Review, News and Weather. 1.0—Popular Music on Gramophone Records. 1.30—Variety Music on Gramophone Records. 2.0—Concert of Decca Records. 3.0—Light Music on Gramophone Records. 3.30—Popular Music on Gramophone Records. 4.0—Popular Gramophone Concert arranged by the Association des Auditeurs de la Radiodiffusion Française. 7.0—Popular Gramophone Concert. 8.0—Programme arranged by les Galéries Barbès, with the collaboration of M. Marjal and Mlle. France Martis. 8.30—News, Sports Notes, Press Review and Weather.

8.45—*Radio Paris Music Hall* conducted by Maurice André. Soloists: M. Priolet, M. Aldoni and Mare Marthe Daumont. March, Abdulla (Meny). The Flower Waltz (Tchaikovsky). Songs: (*a*) Folie Exquise (Alberty-Mario), (*b*) La Vieille Cheminée (Bernal-Desmonlius), (*c*) La Java du Samedi (Alberty-Loyraux). Selection from "Rip Van Winkle" (Planquette).

9.15—Press Review and News.

9.30—*Concert (continued).* Overture, "Der Bettlestudent" (Millöcker). Songs: (*a*) La Fortune, (*b*) Quand une femme dit non (Alberty-Mario). Pour en arriver là (Bournel-Lenoir). Sérénade lointaine (Filipucci). Songs: (*a*) T'aimer, te chérir, t'adorer (Alberty-Léojac), (*b*) Chanson (Alberty-Léojac). Tango diamants (Bournel-Lenoir). Waltz, Frühlingstraum (Johann Strauss). Items ny Mlle. Jeanne Guionie. Tango, O Cara Mia (Brodsky). Selection from "Les trois jeunes filles nues (Moretti). Waltz, Le Chanteur inconnu (Sylviano). Onestep, Encore Cinquante Centimes (Christiné).

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; *Lausanne*, 442 kc/s (680 m.) and *Geneva*, 395 kc/s (760 m.).

Transmits at intervals from 8.30 a.m. 6.0 *p.m.* (from *Geneva*)—Concert of Light Music on Gramophone Records. 6.50 (from *Geneva*)—Sports Notes. 7.0 (from *Geneva*)—Talk. 7.20 (from *Geneva*)—Concert by the Station Orchestra, with the collaboration of Edmond Appia (Violin). 9.0—Weather and News. 9.15 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW.

Transmits at intervals from 4.0 a.m. 6.5 *p.m.*—Orchestral Concert. 7.0—Soloist Concert of French Music. 8.0—Weather Report. 8.5—Orchestral Concert. 8.35—Dance Music. 10.0 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (1RO) 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.) and 2RO, 3,750 kc/s (80 m.).

9.0 *a.m.*—Religious Programme. 9.15—Sacred Music. 9.45—Sports Notes and Amusement Guide. 10.0—11.30—Interval.

11.30—*Vocal and Instrumental Concert*, Duets from (*a*) "La cambiale di matrimonio" and (*b*) "La scala di seta" (Rossini), (*c*) "Il campanello di notte" (Donizetti). Violin Solos by Maria Flori: (*a*) Adagio religioso (Vieuxtemps), (*b*) La Ronde des lutins (Bazzini). Selection from "Light Cavalry" (Suppé). Simple aveu (Thomé). Wedding Day on Troldhaugen (Grieg). Selection from "The Czarevitch" (Lehar). Romanza boema (Boldi). Donna Grazia (Ravasini). In the interval at 12.30 *p.m.*—Time and Announcements.

1.0—3.15—No Transmission. 3.15 (from *Naples*)—Programme for Children, Weather and Sports Notes. 3.45—Sports Notes.

4.0—Concert conducted by Bernardino Molinari, relayed from the Augusteo. "*The Resurrection of Christ*"—Oratorio for Soloists, Choir and Orchestra (Perosi). Concerto for Violin, String Quartet, Cembalo, Organ and another String Quartet (Vivaldi). 6.0—Sports Notes and Announcements. 6.30—*English Gramophone Records.* 7.0—Time, News and Gramophone Records of Light Music. 7.30—Sports Notes.

7.45—"Bufere estive"—Musical Play in Three Acts (Gentili). In the intervals, Literary and Art Notes, Topical Review and News.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.); and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 1.0 p.m.

SUNDAY continued

7.15 *p.m.*—5.30 *a.m.*—*New York* Relay. 7.15 *p.m.*—Sunday Bright Spots. 7.30—Moonshine and Honeysuckle. 8.0—Wayne King's Orchestra. 8.30—National Sunday Forum. 9.0—Musical Programme. 9.30—Davey Tree Hour. 10.30—General Electric Circle. 11.0—Catholic Hour. 11.30—Our American Schools. 12 *midnight*—Los Pamperos.

12.15 *a.m.* (*Monday*)—Rexall Radio Party. 12.30—Iodent Club of the Air. 1.0—Chase and Sanborn Programme. 2.0—Political Talk. 2.15—American Album of Familiar Music. 2.45—Buick Musical Comedy Programme.

3.15—National Oratorio Society Programme. 3.45—Sunday at Seth Parker's. 4.15—Ralph Kirbery (Baritone). 4.30—Jesse Crawford (Organist). 5.0—Palais d'Or Orchestra. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BERO-MÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 k.W; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).

9.30 *a.m.* (from *Zürich*)—Protestant Service. 10.10 (from *Zürich*)—Sonata da Chiesa (Caldara) for Two Violins, 'Cello and Pianoforte.

10.30—See Leipzig. 11.0—Light Music on Gramophone Records. 11.28—Time Signal, Weather and News. 11.40—Orchestral Concert. 12.45—2.0 *p.m.*—Interval.

2.0—Popular Music on Gramophone Records. 2.20 (from *Berne*)—Talk by Dr. Vettergötti on Easter and Easter Customs. 2.45 (from *Berne*)—Concert by the Miquette Orchestra of Fribourg. 3.30—German Sacred Songs on Gramophone Records. 4.0 (from *Berne*)—Catholic Service. 4.30—Weather Report. 4.35—5.30—Interval.

5.30 (from Zürich)—Talk: An Introduction to the Classical Religious A-cappella Song. 6.25—Sports Notes. 6.28—Time Signal and Weather Forecast. 6.30 (from *Zürich*)—Talk by Dr. Ludwig Köhler. 7.0 (from *Basle*)—Musical Programme.

8.0—Easter Scenes from "Faust" (Goethe), arranged for the Microphone by Werner Hausmann. 8.40—Concert of Light Music by the Station Orchestra. 9.0—Weather, News and Sports Notes. 9.15 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by *Boden*, 244 kc/s (1,229.5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Östersund*, 389 kc/s (770 m.); and *Sundsvall*, 554 kc/s (542 m.).

9.30 *a.m.*—Rural Programme. 10.0—Divine Service. 11.45—Weather Report. 1.0 *p.m.*—Choral Concert, conducted by Elof Rydberg, relayed from *Boden*.

1.30—Symphony Concert conducted by Vaclav Talich, relayed from the Concert House. Soloist: Hans Jensen (Violin). La Mer (Debussy). La Folia for Violin and Orchestra (Corelli). Pastoral Symphony No. 6 in F Major (Beethoven).

3.0—Easter Programme for Children. 3.45—Programme relayed from *Göteborg*. Songs by Margareta Högfors, Reading and 'Cello Recital by Elov Levén. 4.0 (in the interval)—Weather Report. 4.30—Reading. 5.0—Divine Service. 6.15—Weather Report.

6.25—*Soloist Concert.* Gösta Rybrant (Violin), Fritjof Kjellberg (Pianoforte) and Magnus Strömbom (Songs).

7.0—"*Faust*"—Play (Goethe), produced by Olav Molander. 8.45—Weather Report.

9.0—Chamber Music Concert, conducted by Tor Mann, relayed from *Göteborg*. Soloists: Bronislaw Gimpel and Lars Fermaeus (Violin). 10.0—(approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.

9.30 a.m.—Chimes and Pontifical High Mass from the Cathedral. Gregorian Chants for Easter and Mass in G (Huber). 10.45—Protestant Service. 11.30—Catholic Service. 12 *noon*—Gramophone Records of Classical Music.

12.45 *p.m.*—News in French and German. 1.0—Time Signal. 1.2—Gramophone Concert of Operatic and Light Music. 2.0—Talk in German: Poultry-breeding and the present Agricultural Crisis. 2.15—Gramophone Records of Light Music. 3.45—Gramophone Records of Dance Music. 4.30—Talk in French: Technical Instruction. 4.45—Talk in French: Vosges' Cattle. 5.0—Dance Music. 6.0—Health Talk in French. 6.15—Sports Results. 6.20—Sports Talk in French.

6.30—Gramophone Concert of Light Music. 7.30—Time Signal. 7.32—News in French and German. 7.45—Gramophone Records of Popular Music. 8.30—Literary and Musical Programme. 10.30—Dance Music from the Savoy. 12 *midnight*—(approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiburg*, 527 kc/s (570 m.).

Transmits at intervals from 8 a.m. (Hamburg Harbour Concert).

9.30 *a.m.*—Divine Service relayed from the Monastery, *Beuron*. 10.30—National Transmission relayed from *Leipzig*. 11.10—Concert from *Frankfurt*. 1.0 (from *Karlsruhe*)—Concert of Viennese Music. 1.30—Concert by the Concordia Male Voice Choir. 2.0—See *Frankfurt*. 3.0—5.55—See *Frankfurt*.

5.55—*Pianoforte Recital* by Karl Keidel. Thirty-two Variations in C Minor (Beethoven). Military March (Schubert-Taussig). Etude in C Major (Rubinstein). Saint Francis walks on the Waves (Liszt). La Campanella (Liszt).

6.20—Sports Notes. 6.30—11.0—See *Frankfurt*. In the interval at 9.20—News, Time, Programme Announcements. 11.0 (approx.)—Close Down.

TOULOUSE (France)

Radiophonie du Midi. 779 kc/s (385 m.); 8 kW.

Transmits at intervals from 12.30 p.m. 6.0 *p.m.*—Popular Songs. 6.15—Military Music. 6.30—News Bulletin. 6.45—Overture, "Fingal's Cave" (Mendelssohn). 7.0—Sound Film Music. 7.15—Instrumental Music. 7.30—News Bulletin. 7.45—Selections by an Argentine Orchestra.

8.0—Sacred Music. 8.15—Orchestral Music. 8.30—Operatic Song Recital. 8.45—Selections by a Viennese Orchestra. 9.15—Light Music. 9.30—Accordion Solos. 9.45—Operetta Music. 10.0—Selection from "La Péri" (Dukas).

10.15—Songs from Opéra-Comique. 10.30—News Bulletin. 10.45—Songs from Operettas. 11.0—Dance Music. 11.15—North African News. 11.30—Orchestral Concert. 12 *midnight*—Weather and Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.

8.40 *a.m.*—6.5 *p.m.*—See *Turin*. 6.5—Quintet Concert. 7.0 till Close Down—See *Turin*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.); and *Genoa*, 959 kc/s (312.8 m.).

8.40 *a.m.*—Giornale radio. 8.55—Chimes and Missa Cantata from the S. Giusto Cathedral. 10.0—Religious Programme. 10.20—Agricultural Report. 11.20—Snow Report and German Lesson on Gramophone Records.

11.30 *a.m.*—1.30 *p.m.*—Variety Concert. In the interval at 12 *noon*—Time and Announcements. 2.50—Football Report. 3.0—Programme to be announced.

4.0—Symphony Concert conducted by Ugo Lanoini. 5.25—Variety Programme. 6.0—Football Report. 6.5—Announcements. 6.10—Musical Programme. 6.30—Variety Music on Gramophone Records. 7.0—Giornale radio, Sports Notes and Popular Gramophone Music. 7.20—Variety Concert.

8.0—Transmission of an Opera. In the intervals, Talk, Theatre Notes and Giornale Radio. After the Opera, News.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.); *Innsbruck*, 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.); and *Salzburg*, 1,373 kc/s (218 m.).

8.35 *a.m.*—Cathedral Chimes. 8.40—Wind Instrument Fanfare on the Entry of The Bishop—a Relay from *Linz*.

8.50—Concert by the Vienna Symphony Orchestra, conducted by Robert Heger. Soloist: Gisela Springer (Pianoforte). Trio in E Major for Two Violins, 'Cello and Basso continuo (Johann Stamitz). Pianoforte Concerto in C Major (Haydn). First Symphony in B Flat Major, Op. 38—the Spring Symphony (Schumann). Symphonic Poem, Don Juan, Op. 20 (Richard Strauss).

10.30—An Easter Thought: Vital Energy (P. Georg Bichlmair).

11.0—*Concert by the Vienna Symphony Orchestra*, conducted by Max Schönherr. Overture, "Rund um die Liebe" (Oscar Straus). Waltz, Zwei Herzen, doch nur eins (Richter). Two Selections from "Madame Pompadour" (Fall). Scenes from "The Czardas Princess" (Kálmán). Waltz, Reminiscences of Chemnitz (Oscar Malata)—the Composer conducting. Suite from "Pierrette's Veil" (Dohnanyi). Ballet Scene from "Der Teufelsreiter" (Kálmán). Queen Fairy Dances and Gnomes' March from the Suite. "In a Fairy Realm" (Ketelbey). Overture, "Boccaccio" (Suppé).

12.30 *p.m.*—*Mandoline Concert.* Quartet No. 3 for Mandoline, Violin, Viola and Lute (Giulini). Quartet No. 10 from Mandoline, Violin, Viola and 'Cello (Giovanne Hoffmann). Concerto No. 1 for Mandoline and Pianoforte (Raffaele Calace).

2.0—Time Signal and Programme Announcements. 2.5—Readings from the Works of Gerhart Hauptmann, Robert Michel and Francis Jammes.

2.35—"*Munich and Vienna*"—*Orchestral Concert*, conducted by Otto Römisch. Münchner Marsch (Lehár). Overture, "Flotte Bursche" (Suppé). Waltz, Singen, Lachen, Tanzen (Ziehrer). Marching Song, Wenn die Welt in Fransen geht (Römisch). French Polka, Münchner Kindl (Ziehrer). Potpourri, Für's Herz und Gemüt (Komzak). Waltz, Münchner Bier (Römisch). Overture, "A Night in Venice" (Johann Strauss). Potpourri, Alpensänger (Fetras). French Polka, München-Wien, ein Sinn (Ziehrer). Waltz, Am Wörthersee (Koschat). Selection from "Schön ist die Welt" (Lehár). March, Wien bleibt Wien (Schrammel).

4.35—Talk by Dr. Josef Gergauer, with Recitations and Songs: Classical Humour in World Literature. 5.5—An Easter Reading: "The Way to Emmaus" (Emmerich Reimers).

5.35—Talk by Dr. Adalbert Markovits: The Results of an Austrian Expedition to Greece. 6.5—Time, Sports Notes and Programme Announcements.

6.15—Richard Tauber Gramophone Records.

6.30—"The Bayadere"—Operetta in Three Acts (Kálmán). 8.45—News and Announcements.

9.0—Recital by the Vienna Boys' Choir, conducted by Georg Gruber (relayed to America). Selection from "Rienzi" (Wagner). Selections (Schubert): (*a*) Liebe, (*b*) Ständchen. Halleluja (Burckhart). Alleluja laus et gloria (Orlando di Lasso). Ascendit Deus (Jacobus Gallus). Folk Melodies: (*a*) Es wollt' ein Jägerlein jagen, (*b*) Gestern bei Mondenschein, (*c*) Der Jäger aus Kurpfalz.

9.30—Two and a Half Years of Sound Films—Popular Songs by the Hanns Robert Korngold Jazz Band with Vocal Refrains by Hede Fischer and Ernst Schön.

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.

9.0 a.m.—High Mass Relay. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Weather Forecast.

11.15 — Programme relayed from *Lwów*. 11.35—Programme to be announced. 12.15—3.0 *p.m.*—Interval. 3.0—Agricultural Programme. 4.0—Variety Music on Gramophone Records. 4.45—Programme to be announced. 6.30—Light Music on Gramophone Records.

7.30—Concert of Popular Music by Mme. Bandrovska-Turska (Soprano), Irene Dubiska (Violin) and L. Urstein (Pianoforte). 8.45—Literary Programme: "Vengeance" (Arthur Gorsky). 9.0—Dance Music and Light Music.

WILNO (Poland)

533 kc/s (563 m.); 16 kW.

10.0 *a.m.*—Divine Service relayed from the Ostra Brama Chapel. 11.35—4.0 *p.m.*—See *Warsaw*. 4.0—Programme Announcements. 4.5—Humorous Music on Gramophone Records. 5.0—Programme for Children. 5.30—9.0—See *Warsaw*. 9.0 (approx.)—Close Down.

MONDAY (March 28)

PRINCIPAL EVENTS

SACRED MUSIC

8.5 a.m. Langenberg: Easter music.
10.30 „ Leipzig and all German Stations: Easter Monday Cantata, "Erfreut euch, ihr Herzen" (Bach).

CONCERTS (Vocal and Instrumental)

6.0 a.m. Hamburg and other German stations: Harbour Concert from the S.S. *New York*.
6.30 p.m. Brussels No. 1: Debussy programme.
7.0 „ Munich: The Wireless Orchestra.
7.40 „ Huizen: Popular programme.
7.45 „ Copenhagen: Modern Danish Choral Music.
8.0 „ Italian Stations (all): Symphony Concert.
9.30 „ Radio-Paris: Popular programme.

OPERAS AND OPERETTAS

6.0 p.m. Leipzig: "Don Carlos" (Verdi), relayed from Dresden.
6.30 „ Budapest: "Faust," relayed from the Royal Opera House.
6.45 „ Stockholm: "The Gipsy Princess" (Kálmán).
8.0 „ Brussels No. 2: "La Fille du Tambour Major," from La Scala, Antwerp.
8.0 „ Radio-Paris: "La Traviata" (Verdi) (gram.).
8.5 „ Munich: "Parsifal," Act III, from the National Theatre.

CHAMBER MUSIC

7.40 p.m. Bucharest: Pianoforte Quintet (Dvorák).

MISCELLANEOUS

10.30 a.m. Vienna: Haydn Commemoration, relayed from his birthplace, Rohrau.
7.0 p.m. Berlin (Königs Wusterhausen), other German Stations and Vienna: The twenty-fifth Jubilee of Cornelis Bronsgeest.

DANCE MUSIC

9.30 p.m. (approx.). Berlin, Langenberg: The Dajos Bela Band.
10.0 „ Copenhagen (till 12): Teddy Petersen's Band.

Verdi's *Lady of the Camelias*

The tragic story of Verdi's *La Traviata*, to be broadcast from gramophone records to-day by RADIO-PARIS, was made for him from Dumas's play, *The Lady of the Camelias*. The opera, whose melodies have long been among the best known throughout the world, was not very warmly welcomed on its first appearance. For one thing the characters appeared in modern dress, which was a rather startling break with opera traditions, in 1853, when it was given in Venice. And there is another difficulty which is not always easily overcome. Violetta, the heroine, is a pale, delicate creature, who dies, in the end, of consumption. But at the first performance the prima donna who took the rôle was an extremely healthy-looking lady of distinctly generous proportions, and her untimely death from a wasting disease seemed to the audience so unlikely that the singer came in for a good deal of chaff. Italian audiences were, and indeed still are, inclined to be free in their comments, even during a performance. More than one distinguished singer since then, who has been successful in the vocal side of the part, has found it difficult to wear the frail and delicate look which it demands. Singing is a healthy exercise, as the looks of singers frequently proclaim.

Haydn's Harpsichord in the Musikfreunde Museum, Vienna.

The Tragedy of Don Carlos

Verdi's opera, which LEIPZIG station is relaying from Dresden this evening, presents Philip II of Spain, Don Carlos's father, as almost incredibly cruel; were it not for the splendid music with which Verdi has invested it, the tale would be too grim even for the opera stage. Carlos and the Princess Elizabeth of Valois are deeply in love with one another, and when, for State reasons, the Princess has to marry King Philip, she and Carlos make heroic efforts not to meet. Fate, however, aided by the jealousy of the Princess Eboli—who is also in love with Carlos—is too strong, and the King discovers his wife and his son together. The opera ends with Philip calmly handing Carlos over to the Inquisition to be cruelly put to death.

The Djinns of Arabia

It is one of the odd things in César Franck's career that he left the pianoforte alone for a good many years, although it was his first instrument. Towards the end of his busy life, he turned to it again with enthusiasm, and *Les Djinns*, which may be heard from ROME this evening, was the first outcome of that renewed interest. It is a symphonic poem in one movement, in which the pianoforte is used rather as a member of the orchestra than as a solo instrument with accompaniment—a new departure at that date. The subject is one of the poems in Victor Hugo's book, *Les Orientales*, with the same title as Franck's piece. The Djinns were malevolent spirits in the Arab mythology, and in his music Franck sets before us the approach of dragons and all manner of monsters, fleeing before the North wind; we hear their awful cries and shrieks as they come nearer, and pass by on their flight.

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 *a.m.*—The Daily Service.
10.30—10.45—Time Signal (Greenwich), Shipping Forecast.
12 *noon*—A Light Classical Concert. Margaret Bissett (Contralto). The Olive Tomlinson Trio.
12.45 *p.m.*—The Commodore Grand Orchestra, directed by Joseph Muscant.
1.0—Time Signal (Greenwich).
1.45—"Hints from Other Cooks"—XIII.
2.0—Housewives' News.
2.5–2.30—Gramophone Records.
4.0—Moschetto and his Orchestra, from The Dorchester Hotel.
4.45—Time Signal (Greenwich).
5.15 (Daventry)—The Children's Hour.
5.15 (London and Northern)—The B.B.C. Dance Orchestra, directed by Henry Hall.
6.0—"The First News."
6.30—Time Signal (Greenwich).
6.30—The Foundations of Music. Haydn Pianoforte Sonatas, played by Frank Merrick.
6.50—7.20—"New Books." Mr. Desmond MacCarthy.
7.30—Reginald Foort at the organ.
8.0—The Ridgeway Parade. A Song and Dance Show. Written by Holt Marvell and Philip Ridgeway. Devised and Produced by Philip Ridgeway.
9.0—Time Signal (Greenwich).
9.0—"The Second News."
9.15—Shipping Forecast.
9.20—"The Unknown Island"–XII. Mr. S. P. B. Mais.
9.35—The B.B.C. Orchestra (Section D), conducted by Stanford Robinson. Overture, William Tell (Rossini); Two Slav Dances, Nos. 1 and 2 (Dvorak); Suite, No. 2, Peer Gynt (Grieg); Irish Dance, Wicklow Fair (Cyril Dalmaine); Suite, The Veil of Pierrette (Dohnanyi); Shepherd Fennel's Dance (Balfour Gardiner).
10.45—12 *midnight*—Dance Music. Ambrose's Blue Lyres, from The Dorchester Hotel.
11.30—Time Signal (Greenwich).

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 *a.m.* (London and Northern)—The Daily Service.
10.30–10.45 (London and Northern)—Daventry National Programme.
12 *noon*—Ernest Parsons and his Orchestra.
1.0 *p.m.*—Reginald Dixon at the Organ.
1.45—3.0—The Midland Studio Orchestra, directed by Frank Cantell. Dorothy Byrt (Contralto).
4.0 (London and Northern)—Daventry National Programme.
5.15—The Children's Hour.
6.0—"The First News."
6.30 (London)—The J. H. Squire Celeste Octet. Herbert Thorpe (Tenor). Foster Richardson (Bass).
6.30 (Midland)—Schubert (Songs from "The Maid of the Mill" Cycle). A Recital by Percy Underwood (Baritone).
6.30 (Northern)—An Excerpt from Francis Laidler's New Revue, "Made in Britain," relayed from The Empire Theatre, Leeds. Cast: Noreen Davis, Phyllis Goodwin, George McNaughton, Billy Low and Arthur Webster, Rita White, The Lawrence Tiller Stars, Francis Laidler's Rolls-Royce Chorus and George Lacy.
7.0 (Midland)—Foden's Motor Works Band, conducted by F. Mortimer.
8.0 (London)—The Wireless Military Band. Conductor, B. Walton O'Donnell. Mario de Pietro (Mandoline).
8.0 (Midland)—"Holiday Scenes." The Midland Studio Orchestra, directed by Frank Cantell. Eric Cross (Tenor).
8.15 (Northern)—Jack Martin and his Hotel Majestic Orchestra. D. Blyth (Xylophone.)
9.15—The B.B.C. Dance Orchestra, directed by Henry Hall.
10.15—"The Second News."
10.35—11.0 (Midland)—As London.
10.35—12 *midnight* (London and Northern)—Dance Music. Ambrose's Blue Lyres, from The Dorchester Hotel.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.
11.0 *a.m.*—Chimes from the Cathedral and Weather Report. 11.15—1.0 *p.m.*—Interval. 1.0—Light Music on Gramophone Records.
1.30—*Sextet Concert*. Spanish Dance, No. 5 (Granados). Selection from "La canción del olvido" (Serrano). Romantica, No. 1 (Torrens). Spanish Scene (Diez Cepeda). 2.0—Theatre Notes, Variety Music on Gramophone Records and Cinema Notes.
2.20—*Sextet Concert* (contd.). Gondolierlied (Mendelssohn). Selection from "The Geisha" (Jones). Rondo Pastoral on a Beethoven Theme (Tavan). Tirolesa (Krone) 2.50—Labour Exchange Report. 3.0—Programme for Hospitals and Benevolent Institutions, with Gramophone Records. 4.0—5.30—Interval. 5.30—Variety Music on Gramophone Records.
6.0—*Concert by the Station Orchestra*. Pasodoble, Vamos a verlo (Trescasas). Selection from "Das Fürstenkind" (Lehár). Waltz, On the Banks of the Neva (Eilenberg). By the Blue Hawaiian Waters (Ketelbey).
6.30—Recital of Tenor Songs by Antonio F. Cavalliere. Cançó d'amor i de guerra (Mora and Martinez Valls). La Dogaresa (Millán). Aria from "La Favorita" (Donizetti). Aria from "L'Africaine" (Meyerbeer). 7.0—Programme by Rosa Coté.
7.10—*Concert by the Station Orchestra* with Joaquina Albarracín (Soprano). Suite Miniatura (Coppola). Songs: (*a*) Aria from "Faust" (Gounod), (*b*) Aria from "Madame Butterfly" (Puccini). Miramar (Turina). Spanish Dance, Jardines de la Alhambra (Torrens). Songs: (*a*) El cantar del arriero (Diaz Giles), (*b*) Romance from "La Rosa del Azafran" (Guerrero). Orchestral Suite, El Secreto de Myrto (Berardi). 9.0—Request Gramophone Concert. 11.0 (approx.)—Close Down.

BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW.
8.55 *a.m.*—Programme Announcements. 9.0—Divine Service from the Old Catholic Church. 10.0—Light Music on Gramophone Records. 10.20—Tidal Report, followed by Popular Music on Gramophone Records. 10.57—Time Signal and Chimes.
11.5—*Concert by the Station Orchestra*. Overture, "Peter Schmoll" (Weber). Suite, Les Beaux Dimanches (Fauchey). Waltz Intermezzo (Bayer). 11.35—Exchange Quotations and *Concert (contd.)*. Dance Suite from "The Bartered Bride" (Smetana). Selection from "Countess Maritza" (Kalman).
12.30 *p.m.*—Cinema Review and News. 3.0—Popular Music on Gramophone Records. 4.0—Recital of National Songs.
4.30—*Pianoforte Recital*. Fantasia, Op. 17 (Schumann). Arabesque No. 2 (Debussy). Cordoba, Op. 232 (Albeniz). Seguidillas, Op. 232 (Albeniz).
5.55—Time Signal and Programme Announcements. 6.0—French Lesson. 6.30—Gymnastics. 7.0—Song Recital.
7.30—*Concert by the Station String Quartet*. Quartet, Op. 59, No. 1 (Beethoven). 8.10—Talk (to be announced). 8.35—Concert of Scandinavian Music by the Station Orchestra. 9.20—News Bulletin.
9.40—Songs from Operetta by Frau Evka Mikulic. 10.10—Concert from the Moskva Café.

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.). ; 60 kW
Transmits at intervals from 5.45 a.m. (*Witzleben* Relay).
10.30 *a.m.*—See *Berlin* (*Witzleben*).
1.0 *p.m.*—Talk: Spring on the Rhine and on the Mountain Roads.
1.30—Talk: The Resurrection in Plastic Art. 2.10—See *Berlin* (*Witzleben*). 3.0—Making Music with Invisible Partners.
3.25—See *Berlin* (*Witzleben*). 5.15—Reading of Poems. 5.30—Talk: March as a Month for Garden Flowers. 6.0—See *Langenberg*. 6.50—See *Berlin* (*Witzleben*). 11.30 (approx.)—Close Down.

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.): 1.5 kW.
Transmits at intervals from 5.45 a.m. (Gymnastics and Hamburg Relay)
10.39 a.m.—See Leipzig. 11.10—Reading of Poems. 11.20—Concert by the Berlin Symphony Orchestra conducted by Dr. Frieder Weissmann. 1.0 *p.m.*—Programme for Parents and Children. 1.40—Talk on the Famous Organs in the 500-year-old St. Nicholas Church in Jüterbog, with Recital by Georg Kempff.
2.10—Recital by the Comedian Harmonists. 3.25—Racing Report from the Karlshorst Racecourse.
3.45—Concert of Light Music from the Hotel Bristol. 5.15—"An Easter Walk, 1932," by Alfred Mühr.
5.45—Concert of Chamber Music.
6.30—Prose Reading. 6.50—Sports Notes.
7.0—Programme for the Twenty-Fifth Jubilee of Cornelis Bronsgeest as a Berlin Artist relayed from the Kaiserdamm Exhibition Hall. *Part I.* A Quarter of a Century of Berlin Opera—conducted by Leo Blech. *Part II.* Operetta Music and Popular Songs—Concert by the Berlin Wireless Orchestra, conducted by Bruno Seidler Winkler, the Hans Schindler Jazz Band, the Berlin Wireless Choir and Soloists. The Whole Performance under the direction of Cornelis Bronsgeest. News in an interval. 9.30—News Bulletin, followed by Dance Music by the Dajos Béla Orchestra. 11.30 (approx.)—Close Down.

BORDEAUX-LAFAYETTE (France)

(PTT) 986 kc/s (304 m.); 13 kW.
12.45 *p.m.*—Septet Concert. 1.50—Exchange Quotations. 2.0—Concert of Light Music on Gramophone Records. 7.30—News, Exchange and Market Prices. 7.40—Sports Report. 7.55—Lottery Results. 8.0—Popular Music on Gramophone Records. 8.15—Charades from the Prima Café. 8.20—News and Weather Forecast.
8.30—*Concert of Classical and Modern Music*. Soloists: Mme. Germaine Ibarboure, M. Bernasconi (Bass), M. Barouk ('Cello), M. Champeil (Violin), and M. Grange (Piano). Violin Solo: Allemande from the Second Sonata for Violin (Bach). Two Bass Solos: (*a*) Song from "Thaïs" (Massenet), (*b*) Rosa

Benedicta (Augusta Holmes). Two Songs: (*a*) Phöbus und Pan (Bach), (*b*) Bleib' bei uns (Bach). 'Cello Solos. Two Pianoforte Solos: (*a*) Etude (Moszkovsky), (*b*) Invitation to the Waltz (Weber). Violin Solos: Spanish Pieces (Albeniz). Two Bass Solos: (*a*) Song from "The Tales of Hoffmann" (Offenbach), (*b*) The Two Grenadiers (Schumann). Songs: Les Trois Poèmes d'un Jour (Fauré): (*a*) Rencontre, (*b*) Toujours, (*c*) Adieu. 'Cello Solos. Pianoforte Solos: (*a*) Prelude and Fugue (Bach), (*b*) L'âne blanc (Ibert). After the Programme, Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).

Transmits at intervals from 6.0 a.m.

10.30 a.m.—See Leipzig. 11.20—See *Berlin* (*Witzleben*).

1.0 *p.m.*—News Bulletin. 1.10—Agricultural Talk. 1.30—Talk on Wireless Disturbances. 2.30—Theatre Talk. 2.40—Talk by Hermann Gaupp: My Journey to Jerusalem. 2.55—Programme for Children: "*The Milk Boy*"—a Radio Play (Lola Landau).

3.40—*Concert by the Russian National Balalaika Orchestra*, conducted by Platon Pantschenko. March of the Guard (Gontscharoff). Spring Waltz (Andreeff). Ukranian Potpourri (arranged Pantschenko). Volga Song (Sverkoff). Gipsy Romance (Steinberg). Melody of the Steppes (Pantschenko). Russian Romance (Bakalainikoff). Cossack Dance (Glinka). Cossack Cradle Song (Privaloff). Burlaki (Streloff). Russian Infantry March (Tchernetzky).

4.40—Talk: South Sea Originals. 5.0—Weather for Farmers. 5.5—With the Franciscans in Breslau-Carlowitz—a Radio Report.

5.40—Concert by the Franciscan Choir, conducted by Dr. Burchard Thiel. Christ ist erstanden. Königin der Himmel. Surrexit pastor (Palestrina). Easter Song. Maria Osterfreud (Müller).

6.15—Weather for Farmers, and Sports Notes. 6.25—Rhymes by Tom the Master-Rhymer.

7.0—See Berlin (Witzleben). 9.30—Time and News. 9.50—See *Berlin* (*Witzleben*). 11.0 (approx)—Close Down.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.

12.15—1.45 *p.m.*—Weather Forecast, followed by *Gramophone Concert*. Overture, "Czar and Carpenter" (Lortzing). Prelude, Op. 3 (Rachmaninoff). Scherzo-Waltz (Chabrier). Selection from "Barbe bleue" (Offenbach). Selection from "Louise" (Charpentier). Entr'acte and Gavotte from "Mignon" (Thomas). Rêverie du soir, from the Algerian Suite (Saint-Saëns). Oriental Suite (Popy). Ballet Suite (Popy). The Song of Songs (Moya). Sweet Mystery of Life (Herbert). Selections from "La Cocarde de Mimi Pinson" (Goublier-Tavan). Selections from "Jenny Lind" (Oscar Strauss). Selections from "Cassandre et la Marquise" (Messager).

5.0—Orchestral Concert relayed from the Hotel Atlanta.

6.0—*Gramophone Records*. Histoires naturelles (Ravel). Les Trois Hussards (Nadaud). 6.15—Talk on Pigeon Flying.

6.30—Gramophone Records from the Works of Debussy in commemoration of the Death of the Composer. Prélude à l'après midi d'un Faune. Suite bergamasque. Scene I from Act 1 of "Pelleas et Mélisande." Marche Ecossaise. Fêtes. 7.15—Talk: The Royal Library at Brussels. 7.30—Theatre Review. 8.0—Programme of Monologues, Sketches and Songs.

9.0—Concert relayed from the Memlinc Hall, Antwerp. 10.0—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.

12.15—1.45 *p.m.*—Weather Forecast and Music on Gramophone Records.

5.0—Debussy Festival. 6.15—Franz Smots reads from his own works. 6.30—Organ Recital by M. Louis Joos. 7.15—Variety Items. 7.30—Le Journal Parlé.

8.0—"The Drum-Major's Daughter."—Operetta (Offenbach) relayed from the Scala Theatre, *Antwerp*. In the First interval, Talk: The Last Hours of Captain Scott and his Companions at the South Pole. In the Second interval, Le Journal Parlé.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.

11.0 *a.m.*—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 *noon*—Popular Music on Gramophone Records.

4.0 *p.m.*—*Concert by the Station Orchestra*. March (Horras). Waltz, Telegramme (Johann Strauss). Selection from "Frau Luna" (Lincke). Vers l'Infini (Nigrim). Selection from "La Bohème" (Puccini). Larghetto for Violin and Orchestra (Handel). 5.0—News and Time Signal. 5.10—*Concert* (*contd.*). Madrigal (Wande-Walle). Potpourri of Waltzes by Johann Strauss (Weber). Suite, Scènes d'un Voyage (Foulds). Waltz, Waldnixen (Ertl). Selection (Cambier).

6.0—Scientific Talk. 6.40—Light Music on Gramophone Records.

7.0—Quintet (Dvorak). 7.30—Talk (to be announced). 7.45—Recital of Jazz Music on Two Pianofortes. 8.15—Quartet in A Minor (Schubert) by the Sarvas Quartet. 8.45—News and Close Down.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW.

8.30 *a.m.*—Press Review. 9.0—Sacred Music and Sermon from the Burgkapelle.

10.15—Greek Catholic Service, followed by *Orchestral Concert*, conducted by Otto Berg, Songs by Szidi Elek. Prelude (Järnefelt). Songs by Szidi Elek. Suite No. 1 from "Peer Gynt" (Grieg). Songs by Szidi Elek. Canzonetta (D'Ambrosio). Selection from "Samson and Delilah" (Saint-Saëns). Selection from "Aïda" (Verdi).

1.0 *p.m.*—Light Music on Gramophone Records. 2.30—Programme for Children. 3.0—Dance Music, conducted by R. Fricsay. 4.15—Hungarian Legends by Béla Kempelen.

4.45—*Song Recital by Elisabeth Hoor-Tempis*, with Pianoforte Accompaniment by T. Kazacsay. Das Hirtenmädchen (Schubert). Hirtenlied (Marx). Cäcilie (Richard Strauss). Aria from "Gianni Schicchi" (Puccini). Parla (Arditi). Was die Fische sprechen (Kacsoh). Das gestohlene Pferd (Lanyi). Meine Zwei Weiber (Beretvas). Song (Banffy-Hoor). 5.20—Talk: Stage Fright.

5.50—*Concert by the Bekeffy Duet Singers*. Painting the Clouds with Sunshine (Burke). We all go Oo Haha Together (Harrington). Love for Sale (Porter). Plegaria (Bianco). Song (Eisemann). Cryin' for the Carolines (Warren). Mama Inez. Lola-Lou (Bekeffy). With my Guitar and You (Snyder). Ready for the River (Neil-Moret).

6.30—"Faust"—Opera, relayed from the Royal Hungarian Opera House. In the Intervals, News and Announcements. After the Relay, Concert by the Toll Cigány Band, relayed from the Kovacsevics Restaurant.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.

See *Langenburg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).

7.30 *a.m.*—Gymnastics. 9.0—Divine Service from the Cathedral. 10.30—Weather Forecast. 10.45—News Bulletin. 11.0—Town Hall Chimes.

11.2—12 *noon*—*Concert by Carl Rydahl's Instrumental Ensemble*. Overture, "Preciosa" (Weber). Waltz, Très jolie (Waldteufel). Selection from "The Gipsy Baron" (Johann Strauss). Minuet in C Major (Beethoven). Hungarian Dances, No. 5 in G Minor and No. 6 in D Major (Brahms). Serenade: Hark, Hark the Lark! (Schubert). Selection (Paruy).

1.20 *p.m.*—Gramophone Records of Variety Music. 1.50—Talk for the Housewife.

2.0—*Concert by Mogens Hansen's Instrumental Ensemble*. Soloists: Aage Thygesen (Vocalist). Overture, "Il Guarany" (Gomez). Ballet Music from "Le Cid" (Massenet). Minuet (Paderevsky). Selection from "La Boutique Fantasque" (Rossini-Respighi). German Dance (Reger). Songs: (*a*) Til Rosengaarden gik jeg, and (*b*) Aprilsvise (Niels Gade), (*c*) Laer mig Nattens Stjerne, and (*d*) Lille Kathrine (Hartmann), (*e*) Torstens Sang, and (*f*) Skön er Vaaren (Heise). Overture, "Othello" (Rossini). Waltz, Mein Lebenslauf ist Lieb und Lust (Josef Strauss). Selection from "Il Trovatore" (Verdi). Serenade (Rachmaninoff). Minuet (Boccherini). Comedy Overture (Kéler-Béla).

4.0—Divine Service from the Frederikskirken. 5.20—Talk: Potsdam, an Enchanting City. 5.50—Weather Forecast. 6.0—News Bulletin. 6.15—Time Signal, and Sports Notes.

6.30—Talk: Genius in Journalism.

7.0—Town Hall Chimes.

7.2—*Concert by the Radio Orchestra, conducted by Launy Gröndahl*. March, Paa Kommando (Blon). Overture, "Giralda" (Adam). Waltz, The Danish Guards (Aage-Bruun). Fantasia on Danish National Songs (arranged Lanzky). A Wedding Day on Troldhaugen (Grieg).

7.35—Cembalo Solos from "Pièces de Clavecin" (Couperin), by Folmer Jensen. Passepied. Rigaudon. La Terpsichore. La Diligente. Les Papillons.

7.45—Concert of Modern Danish Choral Music. Jeg vaelger April (Ejnar Jacobsen). Han Ole bor paa Heden (Aksel Agerby). Ved Vesterhavet (Oskar Gyldmark). Den lyse Nat (Finn Höffding). Vagabundus (Poul Helmuth). Tre Rövere (Hans Hjorth). Hövl og Knast (Knudage Riisager).

8.5—*'Cello Recital by Otto Lützhöft*. Andante and Allegro (Boccherini). Les Cherubins (Couperin). Elégie and Papillons (Fauré).

8.25—*Orchestral Concert* (*contd.*). Niagara March (Bayer). Overture, "La dame blanche" (Boieldieu). Prince Valdemar Polka (Carl Nielsen). Cracovienne from "His Life for the Czar" (Glinka). Cavatina from "Faust" (Gounod). Waltz, Münchner Kindl (Komzak). Amorin-Galop (Lumbye). 9.5—Reading (Poul Martin Möller). 9.20—*Orchestral Concert* (*contd.*). March (Rosey). Flora Mazurka (Lumbye). Waltz, A Day in Seville (Waldteufel). Selection from "Die Fledermaus" (Johann Strauss). Battle March (Möller). Gallop, Husarenattacke (Eilenberg).

10.0—Dance Music relayed from the Industri Restaurant. 11.0 (in an interval)—Town Hall Chimes. 12 *midnight* (approx.)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).

6.0 *p.m.*—Vocal and Instrumental Concert. 10.30—Time Signal, News, Weather Report and Close Down.

FÉCAMP (France)

Radio Normandie. 1,364 kc/s (219.9 m.); 1 kW.

Transmits at intervals from 12 *noon*.

7.30 *p.m.*—Popular Music on Gramophone Records.

7.45—Local News. 8.0—Gramophone Records of Light Music. 8.15—News Bulletin. 8.30—Manon—Opéra-comique in Five Acts (Massenet).

12 *midnight*—Concert of Variety Music. 1.0 *a.m.* (*Tuesday*) (approx.)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.).

Transmits at intervals from 6 a.m.

(Hamburg Harbour Concert.)

9.0 *a.m.*—Choral Concert. 9.45—Song Recital by Paul Losse (Baritone): Easter in the Song of Earlier Days.

10.30—National Transmission relayed from Leipzig. 11.15—Radio Report from the Bird-Fanciers' Exhibition at *Stuttgart*. 11.45—Topical Talk. 12 *noon*—11.0 *p.m.*—See *Stuttgart*. In the intervals at 6.20—Sports Notes and at 9.30—News, Time Signal, Sports Notes and Weather. 11.0 (approx.)—Close Down.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.); and *Kiel*, 1,292 kc/s (232.2 m.).

6.0 a.m.—Hamburg Harbour Concert from the Liner "New York."

7.30—Time and Weather. 8.15—News Bulletin. 8.25 (from *Bremen*)—Evangelical Service. 9.55 (from *Kiel*)—Divine Service from the University Church.

10.30—See Leipzig. 11.0—"A Python attacks an Airedale Terrier"—an African Experience (Norbert-Jacques). 11.15—Time and Weather. 11.20 (from *Flensburg*).—Concert by the Municipal Orchestra, conducted by Kurt Barth.

1.0 *p.m.*—"*Spring*"—*Programme of Songs and Recitations*. Song: O, Welt wie bist du schön (Beethoven). Recitation: Ostermorgen (Geibel). Spring Song (Mendelssohn). Recitations: (*a*) Spring (Mathilde Jurgensen), (*b*) Osterwasser (Carl Bradt). Song: Frühlingseinzug (Silcher). Recitation: Nordischer Frühling (Ernst Klueker). Recitation: Es zieht ein Frühlingsmorgen (Lothar — Hans Flatau). Duet: Maiglöckchen und die Blümelein (Mendelssohn). Recitation: Frühlingsbrausen (Geibel) Song: So sei gegrüsst vieltausendmal (Schumann).

1.30—*Concert by the Little Norag Orchestra*, conducted by Gerhard Maasz. March from "Laurin" (Moszkovsky). Overture, "A Masked Ball" (Auber). Tanz unter der Dorflinde (Reinecke). Bilder aus dem Süden (Nicodé). Waltz, An der schönen grünen Narenta (Komzak). Popular Songs by Max Mensing. Overture, "Indigo and the Forty Thieves" (Johann Strauss). Song and Dance from "Das Spielzeug Ihrer Majestät" (Königsberger). Selection from "Victoria and her Hussar" (Abraham). Song from "The Song of Love" (Johann Strauss-Korngold). Potpourri, Hören Sie zu (Dostal).

3.30—Talk: Forgotten German Authors. 3.50—Tea Dance by the Scarpa Orchestra.

5.0—*Concert of Chamber Music*. Pianoforte Concerto, Op. 7, No. 5, for Pianoforte, two Violins and 'Cello (Johann Christian Bach). Quintet, Op. 87, for Violin, Viola, 'Cello, Double Bass and Pianoforte (Hummel).

6.0—Recital of Ballads and Songs by Walter Gättke. The Stormarn Choir and Walter Gättke (Recitations). 6.55—Weather Forecast.

7.0—See Berlin (Witzleben). 9.0—News Bulletin. 9.20—Dance Music by the Scarpa Orchestra from the Café "Haus Siegler."

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).

Transmits at intervals from 6.0 a.m. (Concert from *Danzig*.)

10.30 a.m.—See Leipzig.

11.15—*Concert conducted by Werner Franz*. Overture, "The Hebrides" (Mendelssohn). Ballet, Les petits riens (Mozart). Suite, Chopiniana (Glazounoff). Selection from "Hansel and Gretel" (Humperdinck). Mozartiana (Tchaikovsky). Ein Immortellenkranz auf das Grab Lortzings (Rosenkranz). Alla Mazurka (Gernsheim). Hungarian Rhapsody No. 1 in E Flat Major (Liszt).

1.0 *p.m.*—Programme for Children. 1.30—Puzzle Programme for Children.

2.10—*See Berlin* (*Witzleben*).

3.0 (from *Danzig*)—*Concert by the Danzig Municipal Theatre Orchestra* conducted by Otto Selberg. Soloist: Fritzkurt Wehner (Tenor). Overture, "Mignon" (Thomas). Song from "Le Postillon de Longjumeau" (Adam). Près du berceau (Moszkovsky). Aria from "Martha" (Flotow). Selection from "Das Glöckchen des Eremiten" (Maillart). Song from "Undine" (Lortzing). Japanese Lantern Dance (Yoshitomo). Selection from "The Geisha" (Jones). Waltz Intermezzo, Ballgeflüster (Meyer-Helmund). Song from "Der Göttergatte" (Lehár). Waltz, Tout Paris (Waldteufel). Manon (Engelberger). March, Per aspera ad astra (Ziehrer).

5.0 (from *Danzig*)—Talk: Old Danzig Almanacs. 5.25—Talk by Lisa Treike.

5.45—Song Recital by Elsa Koch. Der Hirt auf dem Felsen—with Clarinet and Pianoforte accompaniment (Schubert). Auf dem Strome—for Soprano and Horn (Schubert). Six German Songs for Voice, Pianoforte and Clarinet Op. 103 (Spohr).

6.30—An Easter Programme of Literature and Music. **7.0—See Berlin (Witzleben).** 9.30—News and Dance Music from *Berlin* (*Witzleben*).

HILVERSUM (Holland)

160 kc/s (1,875 m.); 8.5 kW. (transmitted from *Huizen*).

7.40—9.40 *a.m.*—Programme of the Algemeene Vereeniging Radio Omroep (AVRO). 7.40—Time Signal. 7.41—Light Music on Gramophone Records.

8.40—*Organ Recital by Frans Hasselaar*, with the collaboration of Sophie Haase-Pieneman (Soprano) and Boris Lensky (Violin). Organ Choral (Bach). Soprano, Violin and Organ: (*a*) Vengo a stringerti (Scarlatti), (*b*) Ich ende behende mein irdisches Leben (Bach). Violin and Organ: Ciaconna (Vitali). Soprano and Organ: (*a*) Auf ein altes Bild (Wolf), (*b*) Nun wandre Maria (Wolf), (*c*) Les Mères (Massenet). Violin and Organ: (*a*) Allerseelen (Lassen-Lensky), (*b*) Andante Cantabile (Tchaikovsky-Kreisler). Organ Solo: Improvisation (Hasselaar).

9.40—11.40—Programme of the Liberal Protestant Radio Society (VPRO). Divine Service from *Leeuwarden*).

11.40 till Close Down—AVRO Programme. 11.40—Time Signal.

11.41—*Concert by the Amsterdam Orchestra, conducted by Nico v. d. Linden, and a Children's Choir*. Military March (Saint-Saëns). Selection from "Cavalleria Rusticana" (Mascagni). Two Sélections by the Children's Choir and Orchestra. Overture, "Oberon" (Weber). Songs: (*a*) Old Folks at Home, (*b*) My Old Kentucky Home (Busch). Children's Choir and Orchestra: (*a*) Moederke (Dopper), (*b*) Die Ehre Gottes (Beethoven). Invitation to the Dance (Weber). Two Selections for Children's Choir and Orchestra.

1.10—Talk on Films. 1.40—*Concert* (*contd.*). Two Spanish Dances (Moszkovsky). Serenade for Strings (Pierné). Waltz, Wine, Woman and Song (Johann Strauss). Overture, "The Barber of Seville" (Rossini).

2.10 *p.m.*—A Radio Play.

2.49—Quartet Op. 29 in A minor (Schubert), played by the Helmann Quartet, 4.10—Programme for Children. 5.10—Light Concert by Kovacs Lajos and his Orchestra. Songs by Bob Scholte. The Rhythm Brothers. Accordion Selections by the Three Hawkcourts. 7.10—Weekly Book Talk. 7.40—Time Signal. 7.41—Weather Report and News Bulletin.

7.55—"Carmen"—Opera (Bizet), with the Augmented Wireless Orchestra, conducted by Albert van Raalte. 10.25—Popular Music on Gramophone Records. 10.40—Light Concert by Billy Mason and his Band relayed from the Carlton Hotel. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

1,004 kc/s (298.8 m.); 8.5 kW. (transmitted from *Hilversum*).

8.10—9.10 *a.m.*—Programme of the Catholic Radio Society (K.R.O.). Divine Service. 9.10 till Close Down—Programme of the Christian Radio Society (N.C.R.V.). 9.10—Organ Recital. 9.30—Divine Service from *Hilversum*. 11.10—Gramophone Concert of Sacred Music.

12.10 *p.m.*—*Organ Recital by Jan Zwart*. Easter Suite (Jan Zwart). Trio in C Minor (Johann Sebastian Bach). Toccata and Fugue in D Minor (Johann Sebastian Bach). Andante in B Minor (Johann Sebastian Bach). Concerto in B Flat Major (Händel). Sacred Songs (Jan Zwart). Bénediction nuptiale (Saint-Saëns). Toccata (Renaud). Idylle (Quef). Choral Suite (Jan Zwart).

1.40—Recitations by Mlle. Annie Visch. 2.40—Vocal and Instrumental Concert.

4.10—*Concert by the "Sursum Corda" Society, and the Vivezza Ladies Choir*. Choral 150. Florentine March (Fucik). Au crépuscule (Minne). Allegro from the Concerto, Op. 147 (Terschak). Resurrection (J. W. Franck). Easter Hymn (Johann Sebastian Bach). Selection (Schubert). March, Blaze Away (Holzmann). 4.55—Talk. 5.25—*Concert* (*contd.*). Psalm 23 (Schubert). Wo willst du hin, weils Abend ist (Krieger). Intermezzo (Rhode). Les Rameaux (Fauré). March, San Lorenzo (arr. Bielen). Psalm 66.

6.10—*Gramophone Concert*. Quartet in F Major, Op. 96 (Dvorak). Scherzo capriccioso (Dvorak), by the Berlin Philharmonic Orchestra, conducted by Erich Kleiber. 6.40—Concert by the Löffler Quartet.

7.40—Concert by the N.C.R.V. Orchestra, conducted by Fritz Schuurmann. Soloist: Mlle. Boltke (Vocalist). Overture L'épreuve villageoise (Grétry). Songs: (*a*) Im Abendrot (Schubert), (*b*) Litanei (Schubert), (c) An die Musik (Schubert), Suite, Aus Holbergs Zeit (Grieg). Selection from "Lohengrin" (Wagner), Jeux d'Enfants (Bizet). 8.40—Talk by Prof. de Groot. **9.10—Concert (Contd.).** Concerto grosso in D Minor (Vivaldi). Prelude to an Oratorio (Leonardo Leo). Songs: (*a*) Auf dem Kirchhofe (Brahms), (b) Gesang Weylas (Wolf), (c) Schmerzen (Wagner). Christus verrezen (Kooy). Psalm 98 (Goudimel-Schuurmann). So fahr ich hin zu Jesu Christ. 9.40 (in an interval)—News Bulletin.

10.10—Gramophone Records of

Variety Music. 11.10 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See-*Copenhagen*.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
Transmits at intervals from 6.0 a.m. (Hamburg Relay.)
10.30 a.m.—See Leipzig. 11.15—Readings. 11.40—Talk on Nürnberg.
12 *noon*—*Orchestral Concert*, conducted by Eysoldt. Festival Overture (Lortzing). Selections from "Cavalleria rusticana" (Mascagni). Largo (Händel). Melody (Rubinstein). Waltz, O Frühling wie bist du so schön (Lincke). Suite from "L'Arlésienne" (Bizet). May Song (Micheli). An den Frühling (Grieg). Overture, "La Belle Hélène" (Offenbach). Spanish March (Dreyer).
1.30 *p.m.*—Talk on Bee-keeping. 1.50—Recitations. 2.25—Talk for Workers. 2.50—Programme for Children.
3.30—*Orchestral Concert*, conducted by Wolf. Overture, Vivat Academia (Zimmer). Oriental Suite (Popy). Fantasia, Grieg Reminiscences (Urbach). Slavonic Dance, No. 3 (Dvorák). **4.0—Interlude by a Children's Choir.** 4.30—*Concert (continued)*. Potpourri, From Gluck to Wagner (Schreiner). Waltz, Golden Rain (Waldteufel). Selections from "The Dollar Princess" (Fall).
5.10—Talk for Parents. 5.30—Astronomical Talk. 6.0—Variety Programme. 6.45—Sports Notes.
7.0—Programme from Berlin (Witzleben). 9.30 (approx.) (in an interval) news. 11.30 (approx.)—Close Down.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.).
Transmits at intervals from 6.0 a.m. (Orchestral Concert).
10.30 a.m. — National Transmission "Erfreuet Euch, Ihr Herzen"—Cantata for Easter Monday (Johann Sebastian Bach) by the Municipal and Gewandhaus Orchestra and the Choir of St. Thomas', conducted by Dr. Karl Straube. Soloists: Isolde Riehl (Contralto), Hanns Fleischer (Tenor), Karl Kamann (Baritone), Günther Ramin (Organ), Friedbert Sammler (Cembalo), Edgar Wollgandt (Violin) and Heinrich Teubig (Trumpet).
11.15—See *Heilsberg*. 1.0 *p.m.*—Weather, Time and Agricultural Notes.
1.15—Pianoforte Recital by Franz Wagner. Two Pieces (Rameau, arranged by Franz Aagner): (*a*) Sarabande, (*b*) Tambourin. Sonata in C Major (Mozart). Träumerei (Schumann). Serenade (Schubert-Liszt). Grande Etude staccato (Rubinstein).
1.45—"*Ein Mann fängt klein an Jochen*" . . . .—A Radio Sequence (Jochen Günther) with Selections in Prose and Verse.
2.45—*Concert of Old and New Dances* by the Leipzig Symphony Orchestra and the Emdé Dance Orchestra conducted by Hilmar Weber. Quadrille from "The Queen's Kerchief" (Johann Strauss). Waltz, A toi (Waldteufel). Rheinländer from "Der Teufel lacht dazu" (Holländer). New Dances by the Emdé Dance Orchestra. Quadrille from "Die Landstreicher" (Ziehrer). Waltz, from "Das verwunschene Schloss" (Millöcker). Polka from "Der Frauenfresser" (Eysler). New Dances by the Emdé Dance Orchestra.
4.45—Three Humorous Viennese Stories. 5.15—Songs of the Highroad, —Sung to the Lute. 5.45—Talk on the following transmission.
6.0—"Don Carlos" — Opera in Four Acts (Verdi), relayed from the Opera House, Dresden. 9.30—News Bulletin, followed by Dance Music from *Berlin* (*Witzleben*). 11.30 (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.
7.0 *a.m.*—Agricultural Talk. 8.0—Esperanto Lesson. 8.30—Concert of Sacred Music. 9.0—Religious Reading. 9.30—Topical Talk. 10.0—Orchestral Concert.
2.15 *p.m.*—Educational Programme. 2.45—Recital of National Songs. 3.30—Concert of Light Music. 7.0—Recital by a Choral Quartet. 7.30—Guitar Recital. 8.0—Quintet Concert. 9.0—Time, News and Light Music.

MONDAY
continued

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.
9.0 *a.m.*—Divine Service relayed from the Cathedral. 10.35—See *Warsaw*. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—See *Warsaw*.
2.55 *p.m.*—Popular Music on Gramophone Records. 3.40—Talk: The Mystery of Easter in Poland 350 Years ago. 3.55—Light Music on Gramophone Records and Topical Talk.
4.15—See *Warsaw*. 6.0—Miscellaneous Items. 6.25—Review of "Wireless for Children." 6.40—Sports Notes. 6.45—See *Warsaw*. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW.
8.0 *a.m.*—Relay from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 12 *noon*—Relay from *Paris* (*Ecole Supérieure*). 8.0—Relay from *Paris* (*Ecole Supérieure*).

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.
11.45 *a.m.*—Astronomical Report and Culinary Talk. 12 *noon*—Chimes, Exchange Quotations, Market Prices and Programme Announcements. 12.15—Time Signal and Interval.
2.0—Chimes, Time Signal, Weather Forecast, Theatre Guide and *Concert by the Station Sextet*. Overture, "La Dame Blanche" (Boieldieu). Selection from "Maruxa" (Vives). Selection from "Faust" (Gounod). Selection from "Siegfried" (Wagner). Russian Mazurka (Glinka). Serenata Andaluza (Modesto Romero).
3.25—Programme of Talks. 3.30—Interval. 7.0—Chimes, Exchange Quotations and Market Prices, followed by a Request Concert of Gramophone Records. 8.15—Announcements and Radio Journal. 8.30 (approx.)—Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*.

MUNICH (Germany)

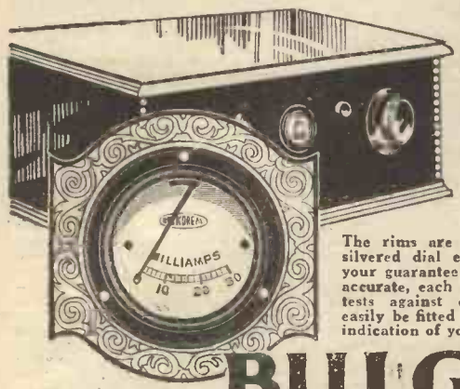
563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.) and *Nürnberg*, 1,256 kc/s (239 m.)
Transmits at intervals from 9.0 a.m.
2.10—*Zither Recital*. Concert Polka, Libellentanz (Albrecht). Song, Wenn sich zwei Menschen küssen (Duche). Potpourri of Viennese Songs (arranged by Allmendiger). Fantasia, Ein Abend am Traumsee (Frank).
2.35—"*Die Sache mit Wurm*"—A Radio Play (Otto Gail).
3.35—*Concert conducted by Erich Kloss*. Overture, "Le roi l'a dit" (Delibes). Torch Dance of the Brides from "Feramors" (Rubinstein). Selection from "Carmen" (Bizet-Fritz). Song, Der Lenz ist da (Hildach). Selection from "The Lady of the Rose" (Gilbert). Serenade, Op. 15, No. 1 (Moszkovsky). March, El Capitan (Sousa).
4.45—Talk: An Audience with the Pope. 5.5—Songs to the Lute, by Oscar Besemfelder. 5.30—Trio in G Minor for Flute, 'Cello and Pianoforte, Op. 63 (Weber).
5.45—"*Poems by Johann Wolfgang von Goethe*" by a Verse-Speaking Choir, with Organ accompaniment. Grenzen der Menschheit. Urworte. Gesang der Geister über den Wassern. Das Göttliche. 6.30—Weather and Sports Notes. 6.40—Destinies and Events—Short Stories.
7.0—Concert by the Radio Orchestra conducted by Hans Winter, Soloist: Richard Staab (Pianoforte). Symphony in G Minor (Mozart). Concerto for Pianoforte and Orchestra in B Flat Minor (Tchaikovsky).
8.5 — "Parsifal" — Third Act **(Wagner)**, relayed from the National Theatre. 9.20—Time and News. 9.45—Concert from the Café Maximilian. 11.0 (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet, 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.); *Porsgrund*, 662 kc/s (453.2 m.) and *Rjukan*, 671 kc/s (447.1 m.).
9.50 *a.m.*—Chimes and Divine Service from a Military Church.
3.30 *p.m.*—*Orchestral Concert* relayed from the Cecil Restaurant. Overture, "Rosamunde" (Schubert). Waltz, Mon Rêve (Waldteufel). Selection from "La Tosca" (Puccini). Crépuscule (Guittard). Serenade (Grünfeldt). Prelude (Järnefeldt). 4.30—Talk (to be announced).
7.0—Concert by the Station Orchestra. Overture, "Oberon (Weber). Selection from "Sicilian Vespers" (Rossini). Selections (Schubert): (*a*) Litanei, (*b*) Erlkönig. Three German Dances (Max Reger). A Musical Journey across Europe (Conradi). Religioso (Johs. Haarklou).
8.0—"*Fangen*"—Play in One Act (Niels Collett Vogt). 8.40—Weather and News. 9.0—Topical Talk. 9.15—Dance Music on Gramophone Records. 11.30 (approx.)—Close Down.

PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW
11.45 *a.m.*—Giornale Radio. 12 *noon*—Concert of Light Music and Jazz. In the Interval, Time Signal, Announcements and Weather. 1.0—4.30 *p.m.*—Interval. 4.30—Programme of Light and Dance Music, relayed from the Olympia Tea Rooms. 7.0—Announcements, Giornale dell' Enit, Agricultural Report, Report of the Royal Geographical Society and Giornale Radio. 7.20—Light Music on Gramophone Records.
7.45—Time Signal and Announcements, followed by *Concert of Chamber Music*. Matilde Orofino (Pianoforte), A. V. Manno (Violin), and R. Padona (Soprano). Pianoforte Solos: (*a*) Prelude in B Minor (Bach-Mangiagalli), (*b*) Sogno sei bello (Fano), (*c*) Perpetuum Mobile (Weber). Fashion Review. Violin Solo: Il Trillo del diavolo (Tartini). Pianoforte Solo: The Death of Isolde (Wagner-Liszt). Taddarita—One Act Play (Martoglio. Violin Solos: (*a*) Adagio (Zandonai), (*b*) Selection (Pick-Mangiagalli), (*c*) Tambourin Chinois (Kreisler). 'Cello Solo: Concerto in D (Lalo). Three Songs for



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Soprano (Longo). 'Cello Solos: (a) Leggenda Tzigana (Janzu), (b) Tarantella (Casella), (c) La Fileuse (Popper). 9.55—Late News Bulletin.

PARIS (France)

Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW.
Time Signals (on 2,650 m.) at 9.26 a.m. and 10.26 p.m. (preliminary and 6-dot Signals).
5.45—*p.m.*—Le Journal Parle. 7.20—Weather Report.
7.30—*Gramophone Concert.* Fantasia on "La Traviata" (Verdi-Tavan). Faut tout prendre à la bonne (Lenoir). Duet from "Manon" (Massenet). Selection (Lehár). Mistigri (Hyams-Marl). Dance Potpourri, Hört und staunt (Dostal).
8.0—Variety Concert with the Collaboration of Mad Rainvyl, Maurice Barbillat (Accordion) and René Paul (Songs).

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.
12 *noon*—Gramophone Records, News Bulletin and Announcements. 12.15 *p.m.*—Popular Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Gramophone Records, Talks and News. 7.30—Light Music on Gramophone Records. 8.30—Gramophone Records, Talk and News.
8.45—*Vocal and Orchestral Concert.* Overture, "La Hussarde" (Fourdrain). Waltz, Gold and Silver (Lehár). Selection from "Le Petit Choc" (Szulc). Second Barcarolle for Pianoforte (Fauré). Selection from "Les cent Vierges" (Lecocq). Pierrot joyeux (Levadé). Selection from "Barbe-Bleue" (Offenbach). Accordion Solos by M. Ferrero. Parade Galante (Ganne). Valse Romantique (Debussy). Spanish Dance, No. 1 (Moszkovsky).
10.45—News Bulletin. 10.50 (approx.)—Close Down.

PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.
7.45 *a.m.*—Popular Music on Gramophone Records. 8.0—News, Weather and Press Review. 8.30—Physical Culture Lesson.
12.30 *p.m.*—*Symphony Concert on Gramophone Records.* Death and Transfiguration (Richard Strauss). Song: The Field-Marshal (Moussorgsky), by Georges Jouatte. Scherzo (Borodin). Les Cigales (Chabrier). Concerto for Pianoforte and Orchestra (Schumann), by Alfred Cortot. Song: Le Promenoir des deux Amants (Debussy), by Roger Bourdin. Selection from "Le Chasseur maudit" (Franck). Fireworks (Stravinsky). In the interval, News and Weather. 6.30—Weather, Agricultural Report, Market Prices and Racing Results. 7.0—Film Review by Fred Cornelissen. 7.10—Review of Books by André Billy.
7.30—*Gramophone Concert.* Si l'on ne s'était pas connu (Parès-Van Parys). Was it a Dream (Coslow). L'amour de ma Vie (Bosc). Au Pays du Jazz (Brennan). 7.45—News Bulletin.
8.0—"La Traviata"—Opera (Verdi) on Gramophone Records, by the Cast of the Scala, Milan, conducted by Molajoli. In the intervals at 8.30—News, Sports Notes, Weather and Review by Mauricet, and at 9.15—Press Review and News.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; *Lausanne*, 442 kc/s (680 m.); and *Geneva*, 395 kc/s (760 m.).
Transmits at intervals from 11.30 a.m.
6.0 *p.m.* (from *Lausanne*).—'*Cello Recital* by Gabriel Bise, accompanied by Mlle. Renée Gascard. Sonata in G Minor (Eccles). Kol Nidrei (Bruch). Idylle (Barns). Chants russes (Lalo).
6.30 (from *Lausanne*).—Talk; Easter Eggs. 6.55—Announcements.
7.0 (from *Lausanne*).—Programme of Operatic Music. 9.0—Weather and News. 9.15 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche. (1RO). 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.); and 2RO, 3,750 kc/s (80 m.).
7.15 *a.m.*—7.30—Giornale Radio and Announcements. 11.0—1.0 *p.m.*—Gramophone Records of Light Music. In the intervals at 11.45—Weather, at 12.15 *p.m.*—Giornale Radio and at 12.30—Time and News. 4.0—Exchange, Programme for Children, Giornale Radio and Announcements.
4.30—*Concert.* Sonata for Violin and Pianoforte No. 8 (Corelli). Soprano Solos by Osna Grossmann Galluccio: (a) Aria from "Dejanice" (Catalani), (b) Doretta's Song from "La Rondine" (Puccini), (c) Aria from "La Juive" (Halévy). Baritone Solos by Vittorio Sensi: (a) Visione veneziana (Brogi), (b) Aria from "The Barber of Seville" (Rossini). Finale from the Sonata in A for Violin and Pianoforte (Pizzetti).
5.55 (from *Naples*)—Shipping News and Sports Notes. 6.0—Agricultural Report, Weather, Announcements, Giornale Radio and Press Review.
7.0—Time and News. 7.5—Gramophone Records of Light Music.
7.45—Sports Notes and Announcements.
8.0—Symphony Concert. 9.0—Fashion Review.
9.10—*Concert.* Viennese March (Ziehrer). Liebeswalzer (Stolz). Soprano Solos by Ester Waldes: (a) Milonguita (Valdes), (b) Sevillanita (Valdes). Selection (Mohr). Sierra Morena (Marchetti). Tenor Solo: Ninuccia (Valente). Tenor Solo: Tarantella internazionale (Tagliaferri). Soprano Solos by Ester Waldes: (a) Mama, yo quiero un novio (Colazo), (b) Reflessos de España (Waldes). Brazilian Rondo (Escobar). Tenor Solo: Vele (Mariotti). Pat-Trick (Vlastoff). 9.55—News Bulletin.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.).
Transmits at intervals from 11.45 a.m.
9.15 *p.m.*—Lois Hardesty (Soprano). 9.30—Stock Reports and Police Notices. 9.45—Musical Ad Men. 10.0—News Bulletin. 10.15—"Skippy" from *New York*. 10.30—Sweetheart Programme from *New York*. 10.45—Russ Columbo and his Orchestra from *New York*.
11.0—Jack Miles and his DeWitt Clinton Orchestra. 11.20—Time Signal. 11.30—Blue Coal Fireside Reveries. 11.45—Musical Programme from *New York*. 12 *midnight*—(WGY only)—Vermont Lumber Jacks from *New York*. 12 *midnight*—(W2XAF only)—Stock Reports and New Items.
12.15—4.0 *a.m.*—(*Tuesday*) *New York* Relay. 12.15—Campbell's Orchestra. 12.30—Prince Albert Quarter Hour. 12.45—Trials of the Goldbergs. 1.0—Soconyland Sketch. 1.30—Voice of Firestone. 2.0—A and P Gypsies. 2.30—Parade of the States. 3.0—National Radio Forum. 3.30—Mr. Bones and Company. 4.0—Arm Chair Chats. 4.15—John Albright (Crooner). 4.30—Jack Miles and his DeWitt Clinton Orchestra. 5.0—Bettye Lee Taylor (Organist). 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BERO-MÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).
11.28 *a.m.*—Time Signal from the Neuchâtel Observatory. 11.30—Weather and News. 11.40—Concert of Light Music on Gramophone Records.
12.35 *p.m.*—Weather and Exchange Quotations. 12.45–2.30—Interval.
2.30—Concert by the Station Orchestra. 3.0—Waltzes and Potpourris on Gramophone Records. 4.0 (from *Basle*)—Programme for Children.
4.30—Weather Report. 4.35—5.30—Interval.
5.30—Spring Songs on Gramophone Records. 6.0 (from *Berne*)—Talk: The Hare and the Egg as Easter Symbols. 6.20 (from *Berne*)—Talk: Memorable Events of the Past. 6.28—Time and Weather. 6.30 (from *Berne*)—Talk: Your Character from the Soles of your Shoes.
7.0 (from Zürich)—Operetta Programme. 9.0—Weather and News
9.15 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by *Boden*, 244 kc/s (1,229.5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Östersund*, 389 kc/s (770 m.); and *Sundsvall*, 554 kc/s (542 m.).
Transmits at intervals from 6.20 a.m.
10.0 *a.m.*—Divine Service. 11.45—Weather Report. 12 *noon*—Report from the National Tennis Championship: Men's Singles. 2.0 *p.m.*—Variety Music on Gramophone Records. 2.45—Reading from *Sundsvall*.

MONDAY
continued

3.15—*Concert*, conducted by Micha Pedersen, relayed from *Malmberget*, 680 kc/s (436 m.). Overture, "Titus" (Mozart). Symphony in B Minor (Schubert). Suite No. 2 from "L'Arlésienne" (Bizet). Norwegian Rhapsody No. 2 (Svendsen). Overture, "Der Bettelstudent" (Millöcker).
4.30—Talk by Marika Stiernstedt.
5.0—Programme on the Occasion of the Anniversary of the Swedish Christian Educational Society, relayed from the Betel Chapel. 6.15—Weather and News. 6.30—Reading.
6.45—"The Gipsy Princess"—Operetta (Kálmán). 8.45—Weather and News. 9.0—Dance Music Programme. 10.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.
11.30 *a.m.*—*Gramophone Concert.* Ballet Music from "Hérodiade" (Massenet). Serenade from "The Barber of Seville" (Rossini). Chanson du berger from "Mireille" (Gounod). Selections from (a) "La Favorita" (Donizetti), (b) "The Tales of Hoffmann" (Offenbach), (c) "Don Quichotte" (Massenet), (d) "La Navarraise" (Massenet), (e) "Lohengrin" (Wagner). Chanson des Blés d'Or (Doria). Reminiscences of Hawaii (Kollo). Il est une maison (Cazes). Elégie (Fauré). Après un rêve (Fauré). Ballad, Op. 118 (Brahms). Alla Spagnola (Glazounoff). The Death of Ase from "Peer Gynt" (Grieg). Selection (Strauss). 12.45 *p.m.*—News in French and German. 1.0—Time Signal.
1.2—*Gramophone Concert.* Selections (Liszt): (a) Sonetto del Petrarca, (b) Liebestraum. Selection from "Les Saltimbanques" (Ganne), "Light Cavalry" (Suppé), "Les Brigands" (Offenbach); and "L'apprenti sorcier" (Dukas). Tone Poem, Baba Yaya (Liadoff). Lehariana (Geiger). Selections (Waldteufel): (a) Soirée d'été, (b) Pluie de diamants.
2.0—4.45—Interval. 4.45—Talk in French: In Provence.
5.0—*Orchestral Concert*, conducted by Roskam. March, Lisbon (Candiolo). Waltz, Mit Schwert und Leier (Josef Strauss). Serenade from "Don Juan" (Mozart). Overture, "Mignon" (Thomas). Waltz-Intermezzo, Papillonspiele (Leopold). Selection from "The Barber of Seville" (Rossini). Selection from "La Reine Fiammette" (Leroux). Selection from "Lilac Time" (Schubert-Berté).
6.0—Talk in French: The Poet, Longfellow. 6.15—Talk in German.
6.30—*Orchestral Concert*, conducted by Maurice de Villers. Overture, "Ruy Blas" (Mendelssohn). Selection from "The Daughter of the Regiment" (Donizetti). Selection from "The Damnation of Faust" (Berlioz). Ballet Music from "Romeo and Juliet" (Gounod). Selections (Glazounoff): (a) Une fête slave, (b) Danse arabe. Selections (Tcherepnin): (a) Valse lente, (b) Intermezzo.
7.30—Time Signal. 7.32—News in French and German
7.45—*Orchestral Concert*, conducted by Maurice de Villers. March (Walter). Waltz, Etoile polaire (Waldteufel). Selection from "Madame Butterfly" (Pussini). Sérénade à l'amour (Fauchey). Czardas, Kossuth (Michiels). 8.30—Gramophone Concert of Variety Music. 10.30 (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiburg*, 527 kc/s (570 m.).
Transmits at intervals from 6.0 a.m.
(Hamburg Harbour Concert).
9.45 *a.m.*—Chamber Music for Viola d'amore, Viola da Gamba and Pianoforte. 10.30—National Transmission relayed from *Leipzig*.
11.0—*Concert by Unemployed Musicians* relayed from the Liederhalle. Overture, Egmont (Beethoven). Italian Caprice (Tchaikovsky). Overture, "Rienzi" (Wagner), followed by Dance Music.
12 *noon*—Folk Music by a Balalaika Orchestra, with Solos. 1.0 *p.m.* (from *Karlsruhe*)—Programme for Children. Two Short Plays: (a) Der belauschte Osterhase (Helene Szpitter), (b) Die zerbrochenen Ostereier (Margot Daniger).
3.0 (from *Baden-Baden*)—*Orchestral Concert* conducted by Karl Assmuss. Overture, "Die Abreise" (d'Albert). Ballet Music from "Feramors" (Rubinstein). Symphonic Poem, From the Fields and Groves (Smetana). Selection from "The Mastersingers" (Wagner). Russian Folk Melodies (Liadoff). German Dances (Mozart). Waltz from "Der Rosenkavalier" (Richard Strauss).
4.30 (from *Karlsruhe*)—*Spring Songs to the Lute.* Prelude. Unter den Linden (Walter v.d. Vogelweide). Dance Song in Spring. Mein Herz hat sich gesellet. Frühling des Lebens. Spring-Day Melodies. Freier beim Tanz. Alle Wiesen sind grün. Kein schöner Land. Es tanzet sich helle. Waldwipfel erblühn (Scheffel). Du hast gesagt, du sollst nicht lieben (Löhns). Der Mai kommt als Freier (Baumbach). Epilogue. 5.15—Authors' Programme — Margrit Wolf.
5.45—*Pianoforte Recital* by Walter Rehberg. Introductory Talk. Introduction and Toccata for Janko Pianoforte (Hans Brehme). Two Dance Studies (Walter Rehberg). Five Fantasias on a Theme by Verdi (Walter Rehberg). 6.20—Sports Notes.
6.30—*Concert by the Philharmonic Orchestra*, conducted by Emil Kahn. Soloist: Louis Graveure. Overture, Leonore, No. 3 (Beethoven). Tarantella from "Masaniello" (Auber). Polonaise in A Major (Chopin-Glazounoff). Aria from "L'Africaine" (Meyerbeer). Indian March from "L'Africaine" (Meyerbeer). Overture, "Susanna's Secret" (Wolf-Ferrari). Aria from "I Pagliacci" (Leoncavallo). Faust Waltz (Gounod). Aria from "Turandot" (Puccini). Salome's Dance (Glazounoff). Hindu Song (Rimsky-Korsakoff). Hungarian Rhapsody, No. 2 (Liszt).
8.0—Variety Programme. 9.20—News, Time, Programme Announcements and Sports Notes. 9.40—Dance Music by the Dance-Ensemble of the Stuttgart Philharmonic Orchestra. 11.0 (approx.)—Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.
7.15 *a.m.*—11.30—See *Turin*. 11.30—Variety Music on Gramophone Records. 11.45—See *Turin*.
12 *noon*—*Quintet Concert.* Madrid (De Micheli). The First Love (Ripp). Brise de nuit (Bonelli). Selection from "The Tales of Hoffmann" (Offenbach). Foglie morte (Amadei). Cradle Song (Viaroggio). Dinah (Davis).
1.0 *p.m.*—3.55—See *Turin*.
3.55—*Quintet Concert.* Soloist: Professor Zapin (Violin). Selection (Siede). Selection from "La reginetta delle rose" (Leoncavallo). Selection from "The Czardas Princess" (Kálmán). Serenade for Violin (Silvestri). Nostalgia (Spirito). Come faccia io (Tagliaferri).
4.50—6.10—See *Turin*.
6.10—*Quintet Concert.* Eastern Twilight (De Micheli). Waltz, Pomona (Waldteufel). Marechiare (Tosti). Finestra infiorata (Montesano). Selection from "I Pagliacci" (Leoncavallo). Blue Rondo (Manno). Song to Mimi (Brero).
7.0 till Close Down—See *Turin*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.); and *Genoa*, 959 kc/s (312.8 m.).
7.15 *a.m.*—Giornale Radio. 7.30—Market Prices.
10.15—*Concert.* Overture, "Gri-Gri" (Lincke). Canzone villereccia (De Micheli). Elegia di passione (Barbieri). Selection from "The Three Musketeers" (Friml). Algerian Scenes (Ketelbey). Waltz (Kaper). Passeggiata degli eleganti (Ranzato). Scandinavian Impressions (Frederiksen). Andalusia (De Serra). Invano (Amadei). Rubacuori (Montagnini).
11.30—Popular Music on Gramophone Records. 11.45—Giornale Radio. 12 *noon*—Time and Announcements.
12.5 *p.m.*—Concert of Light Music.
3.15—Giornale Radio. 3.30—Programme for Children. 3.45—Variety Music on Gramophone Records.
3.55—*Concert.* Turkish March (Beethoven). Song. Andalusian Serenade (Joves). Song. An Evening in St. Petersburg (Meyer-Helmund). Song. Selection from "The Mastersingers" (Wagner). Vent' anni (Marf).
4.50—Giornale Radio, Announcements and Racing Results. 5.45—Agricultural Notes and Report of the Royal Geographical Society. 6.5—Announcements. 6.10—Variety Music on Gramophone Records. In the interval at 6.30—Time and Announcements. 7.0—Giornale Radio, Weather and Popular Music on Gramophone Records.
7.20 (approx.)—*Concert.* Mussinan-Marsch (Carl). Selection from "The Geisha" (Jones). Desert Caravan (Lattuada). Questa era la mia Vienna (Hummer).
8.0—Symphony Concert. 9.0—Comedy. 10.0—Giornale Radio.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.); *Innsbruck*, 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.) and *Salzburg*, 1,373 kc/s (218 m.).
Transmits at intervals from 9.0 a.m.
10.30 *a.m.*—Haydn Memorial Programme, relayed from his Birthplace at Rohrau. 11.40—Concert by the Symphony Orchestra conducted by Josef Holzer. 1.50 *p.m.*—Josef Strauss Concert by the Tautenhayn Quartet. Soloist: Otto Schulhoff. 2.0—Time and News. 2.5—Reading (Auer).
2.30—Concert by the Max Geiger Orchestra. 4.0—Concert by the Kölisch Quartet. 5.20—Talk: An Austrian Engineer in Central America
5.50—Fritz Weber reads from his own Works. 6.20—Time and News.
6.30—Recital on Two Pianofortes.
7.0 — See Berlin (Witzleben). 9.30 (approx.)—News Bulletin. 9.50—Dance Music, relayed from *Berlin* (*Witzleben*).

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.
9.0 *a.m.*—Service from *Lwów*. 10.35—Talk: The Polish Mission at Rhodes. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Weather Forecast.
11.15—*Symphony Concert by the Philharmonic Orchestra*, conducted by T. Mazurkiewicz. Soloists: Micaela Barmas (Violin), and Dora Gutovska (Soprano). Overture, "The Merry Wives of Windsor" (Nicolai). Violin Solo: La Folia (Corelli-Leonard). Songs: (a) Aria from "The Barber of Seville" (Rossini), (b) Variations de concert (Benedict), (c) Song (Ponchielli). The Sewing Machine (Limenta). Pavane Dogale (Mariotti). Burlesque (Culotta). Violin Solos: (a) Nocturne, Op. 9, No. 2 (Chopin-Sarasate), (b) Gavotte, Op 82 (Reger), (c) Die Biene (Schubert).
1.0 *p.m.*—Talk by S. Kobylinsky.
1.20—*Vocal Duets* by Mme. Marwid (Soprano), and Lucie Czechowicz (Contralto), accompanied by L. Urstein. Three Popular Songs (Noskovsky). The Fishermen (Niedzielsky). Cracovienne (Moniuszko).
1.40—Talk: The Pleasures and Cares of a Country House in Spring.
2.0—Light Music by the Orchestra, conducted by W. Wilkosz. 2.20—Programme for Children. 3.20—Light Music on Gramophone Records. 3.40—Talk, relayed from *Lwów*. 3.55—Light Music on Gramophone Records. 4.15—Talk: Hindu Women in the Struggle for the Emancipation of India. 4.30—Hints on the Use of the Polish Language.
4.45—*Concert by the Station Orchestra*, conducted by Jean Dvorakovsky. Soloist: Eugen Maj (Baritone), accompanied by L. Urstein. Overture, "Phèdre" (Massenet). Berceuse from "Manru" (Paderevsky). Bacchanale from "Samson and Delilah" (Saint-Saëns). Baritone Solos: (a) Aria from "La Favorita" (Donizetti), (b) Aria from "Dinorah" (Meyerbeer). Selections from "Cavalleria Rusticana" (Mascagni). Baritone Solos: (a) Toreador Song from "Carmen" (Bizet), (b) Two Arias (Moniuszko): (a) from "The Haunted Castle"; (b) from "Verbum Nobile." Mazurka in D Major, Op. 33 (Chopin). Dances from "Halka" (Moniuszko). News in the Interval.
6.0—Miscellaneous Items. 6.25—Light Music on Gramophone Records.
6.40—Programme Announcements.
6.45—"*Born to Fortune*"—a Play (Rapacki).
7.15—"Das süsse Mädel"—Operetta in Three Acts (Reinhardt), arranged for Radio by Mme. H. Makoviecka. 9.15—Literary Programme. 9.30—Weather and Police Notes. 9.35—Sports Notes. 9.45—Dance Music.

TUESDAY (March 29)

PRINCIPAL EVENTS

SYMPHONY CONCERTS

4.35 p.m. Warsaw: The Philharmonic Orchestra. *Symphonie Classique* (Prokofieff), etc.
7.15 „ Budapest: The Royal Opera House Orchestra. *Italian Symphony* (Mendelssohn), etc.

CONCERTS (Vocal and Instrumental)

7.0 p.m. Bucharest: Concerto for four Violins and String Orchestra (Vivaldi), etc.
7.15 „ Copenhagen: Jazz Music, Vocal and for three pianofortes.
7.45 „ Rome: Popular Programme.
9.0 „ Vienna: Less known Music of Wagner.
10.0 „ Hamburg: Late Concert.

OPERAS AND OPERETTAS

7.0 p.m. Hamburg: "The Count of Luxembourg" (Lehár).
7.45 „ Italian Stations (Northern): "Lilac Time."
8.0 „ Palermo: Relay from the Teatro Massimo Vittorio Emanuele.
8.45 „ Radio-Paris: "The Grand Mogul" (Audran) (Concert Version).

CHAMBER MUSIC

7.0 p.m. Schweizerischer Landessender: Songs at the Spinet and rococo instrumental music.
7.40 „ Huizen: Haydn.

RECITAL

9.0 p.m. Warsaw: Edouard Steinberger (pianoforte).

PLAY

7.45 p.m. Langenberg: "An Everyday Occurrence" (Radio Play by Rudolf Brook).

MISCELLANEOUS

7.0 p.m. Berlin and other German Stations: Cabaret.
7.10 „ Stuttgart, Frankfurt: "A Ball in Cannstatt Kursaal, 1790."

DANCE MUSIC

9.40 p.m. Stuttgart, Frankfurt: The Stuttgart Studio Dance Band.

The *Yellow Princess*

It has not often happened in musical history that one man held undisputed sway as leader in his own art and his own country for so long as Saint-Saëns did. And about his own career there were at least two unusual things; he did not gain the Prix de Rome, the highest award which the Paris Conservatoire gives its students, and one which almost all the most illustrious French musicians have gained in turn, nor did he win his way to success, in the first instance, on the stage—the surest and swiftest road to popularity in the French world of music. His first operatic venture, the *Yellow Princess*, produced in 1874, was so far from being a success that the Paris authorities refused the next operas which came from Saint-Saëns' busy pen, including *Samson and Delilah*, which afterwards achieved so world-wide a popularity. But the overture which HILVERSUM is broadcasting at 8.40 to-night, the only part of the opera which is now heard, is so tuneful that it is difficult to believe that the opera as a whole was a failure when it first appeared. It will be broadcast side by side with other French music, by Lalo, Massenet, and Saint-Saëns again. And all these gain a special interest for the listener who has heard the same station's programme from 6.40, when a talk on Ravel's music is to be given, followed by one of his own recent pieces.

[Photo: Topical.

FRANZ LEHÁR, whose *Count of Luxembourg* is being broadcast by HAMBURG at 7 p.m.

A Modern Classic.

In calling his symphony *Classical*, Prokofieff, best known so far by his *Love of the Three Oranges*, means that it follows the old Haydn and Mozart models in its form—a first movement in lively measure with two main themes, a slow movement, a gavotte, and a lively dance as finale. It was composed in 1916-1917, and the composer has frequently conducted it himself both in public concerts and in broadcast performances: in Paris, particularly, where he makes his home, listeners may claim to know the work fairly well. Prokofieff's fellow-countrymen—he is a Russian by birth—look on his music as a reaction against the religious mysticism of Scriabin: his, so they tell us, is music for its own sake in which the melodies are simple, almost naïve, exploited with barbaric gusto. His themes are chiefly short and strongly rhythmic, and there is a terse vigour in most of his music which sounds as though it despised anything like romantic or emotional expression. It is not music which always wins the affection of its hearers, though it is bound to command their interest: strangely though it may still fall on old-fashioned ears, it has an undoubted effect of exhilaration. The symphony is included in the broadcast from WARSAW station this evening.

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 *a.m.*—The Daily Service.
10.30—Time Signal (Greenwich); Shipping Forecast.
10.45—11.0—"New Ways for Hard Times"—XIII.
12 *noon*—Edward O'Henry at the Organ.
1.0 *p.m.*—Time Signal (Greenwich).
1.0—Leonardo Kemp and his Piccadilly Hotel Orchestra.
1.55—Experimental Transmission (Fultograph Process).
2.5—2.30—Gramophone Records.
4.0—A Sonata Recital. Anthony Pini (Violoncello). Clive Bloom (Pianoforte).
4.30—The Midland Studio Orchestra.
4.45—Time Signal (Greenwich).
5.15 (Daventry)—The Children's Hour.
5.15 (London and Northern)—The B.B.C. Dance Orchestra, directed by Henry Hall.
6.0—"The First News."
6.30—Time Signal (Greenwich).
6.30—The Foundations of Music. Haydn Pianoforte Sonatas. Played by Frank Merrick.
6.50—7.20—Talk.
7.30—Light Programme of Gramophone Records. Arranged by Christopher Stone.
8.0—The Commodore Grand Orchestra, directed by Joseph Muscant.
9.0—Time Signal (Greenwich).
9.0—"The Second News."
9.15—Shipping Forecast; New York Stock Market Report.
9.20—Miss Stella Benson: "News from the Seat of War."
9.35—Chamber Music. John Armstrong (Tenor). The Catterall String Quartet: Arthur Catterall (Violin). Laurance Turner (Violin). John Fry (Viola). Herbert Witkers (Violoncello). Raymond Jeremy (Viola II). Quintet (K.593) (Mozart). John Armstrong: Seven Songs from Heyse's Italianisches Lieder-buch (Hugo Wolf). Quintet in G (Op. 111) (Brahms).
10.50—12 *midnight*—Dance Music. Roy Fox's Band, from Monseigneur.
11.30—Time Signal (Greenwich).

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 *a.m.* (London and Northern)—The Daily Service.
10.30—11.0 (London and Northern)—Daventry National Programme.
11.30—12 *noon* (London)—Experimental Television Transmission (Baird Process) (356.3 m. Vision; 261.3 m. Sound).
12 *noon*—Winifred Thomas (Contralto). Glyn Dowell (Tenor). Nancy Saunders (Pianoforte).
1.0—Gramophone Records.
1.15—Edith Winston (Contralto). The Fred Roche Trio.
2.0—3.0—The Studio Orchestra.
4.0 (London)—Daventry National Programme.
4.0 (Northern)—Evensong. Relayed from York Minster, York.
4.0—4.30 (London)—Television Transmission by the Baird Process (Sound).
5.15—The Children's Hour.
6.0—"The First News."
6.30—Regional Bulletin for Farmers.
6.35 (London)—The Leslie Bridgewater Quintet. Walter Delmar (Baritone). Mary Maddock (Soprano).
6.35 (Midland)—Light Music.
6.35 (Northern)—Laddie Clarke's Imperial Hydro Hotel Orchestra.
7.30 (Midland)—The Studio Chorus.
7.30 (Northern)—Lakeland Views. An Easter Reading by Mr. W. L. Marsland.
7.45 (Midland)—Mr. Leslie Heward: "Next Thursday's Concert by the City of Birmingham Orchestra."
7.50 (Northern)—"Do you Remember?" Studio Orchestra. John Rorke (Baritone).
8.0 (London and Midland)—The Ridgeway Parade. Written by Holt Marvell and Philip Ridgeway.
9.0 (London)—The B.B.C. Orchestra (Section E), conducted by Joseph Lewis. Joseph Farrington (Bass).
9.0 (Midland)—"From the Musical Comedies."
9.15 (Northern)—Bertini's Band.
10.15—"The Second News."
10.35—11.0 (Midland)—As London.
10.35—12 *midnight* (London and Northern)—Dance Music.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.
7.30—8.30 *a.m.*—Topical Review. 11.0—Chimes and Weather. 11.15—1.0 *p.m.*—Interval. 1.0—Light Music on Gramophone Records.
1.30—*Sextet Concert.* Prelude to the Third Act of "Lohengrin" (Wagner). The Rosary (Nevin-Lotter). Ballet Music from "Sylvia" (Delibes). A Night in Venice. (Courtioux). 2.0—Theatre Talk, Variety Music on Gramophone Records and Film Review. 2.20—*Sextet Concert (contd.).* 2.50—Radio Labour Exchange. 3.0—Programme for Hospitals and Benevolent Institutions, with Gramophone Records. 4.0—7.0—Interval.
7.0—*Concert by the Station Trio.* Selection from "Parsifal" (Wagner). Hymn to the Sun (Rimsky-Korsakoff). Selection from "Tannhäuser" (Wagner). March (Händel).
7.30—Exchange Quotations, and *English Lesson.* 8.0—Request Gramophone Concert and Press Notes. 9.0—Chimes and Weather Report. Exchange Quotations and Relay of Foreign Stations.
9.30—*Concert by the Station Orchestra:* March, La Vosgienne (Dalcroze). Carillon from "L'Arlésienne" (Bizet). Bocetos andaluces (Parras del Moral). Prelude to the Third Act of "The Mastersingers" (Wagner).
10.0—Galician Programme by the Station Orchestra, with Carmen Ramos Palazón (Vocalist). 11.30—Dance Music by the Melody Boys, relayed from the Excelsior Dance Hall. 12.0 *midnight* (approx.)—Close Down.

BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW.
Transmits at intervals from 10.0 a.m.
3.0 *p.m.*—Popular Music on Gramophone Records.
3.30—*Concert by the Station Orchestra.* March, Vesela je Srbadija (Andrejevic). Overture, Kosovo (Jenko). Suite from the Music to "As You Like It" (Wetlzer). Dance of the Hours from "La Gioconda" (Ponchielli). Der Blumen Pracht (Klose). Waltz, Moonlight on the Alster (Fétras).
4.30—Beauty Hints. 5.50—Time Signal and Programme Announcements. 5.55—Czech Lesson. 6.25—Talk (to be announced). 6.55—Comedy (to be announced).
7.30—Programme relayed from *Zagreb*, 977 kc/s (307 m.). 9.30—News and Sports Notes. 9.50—Cigány Music relayed from the Amerikanac Restaurant.

BERLIN (Germany)

König Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.
Transmits at intervalsfrom 5.25 a.m. (*Hamburg* Relay).
3.30 *p.m.*—See *Leipzig.* 4.30—Talk: A Century of Matches. 5.0—Talk: The Spreading of Christianity. 5.30—Dialogue on Music. 5.55—Weather for Farmers. 6.0—*Advanced English Lesson.* 6.20—Talk: Goethe as a Theatre Manager.
7.0—See *Berlin* (*Witzleben*). 9.0—News Bulletin. 9.20—Concert of Light Music from the Café Berlin. 10.0—See *Hamburg.* 11.0 (approx.)—Close Down.

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert).
6.0 *p.m.*—Topical Talk.
6.10—*Violin Recital.* Sonata in E Minor (Mozart). Prayer (Händel-Flesch). Prelude and Allegro (Pugnani-Kreisler).
6.30—Talk: A Journey in Spain.
7.0—Two Hours of Variety. (Cabaret)
9.0—News Bulletin.

BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW.
12 *noon*—Relayed from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.).
12.45 *p.m.*—Light Music on Gramophone Records. In the interval, News. 1.50—Exchange Quotations. 2.0—Trio Concert of Chamber Music and Descriptive Music. 7.30—News and Exchange. 7.40—Talk: The Corporations of Bordeaux. 7.55—Lottery Results. 8.0—Topical Talk. 8.15—News and Weather Forecast.
8.30—"*La Samaritaine*"—Play (Edmond Rostand). After the programme—Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).
Transmits at intervals from 5.30 a.m.
4.0 *p.m.*—*Songs from the Works of Silesian Composers*, by Lotte Theile (Soprano). Songs (Wetz): (*a*) Du, (*b*) Das Meer ist für Fischer auf der Welt, (*c*) Aus des Knaben Wunderhorn. Songs (Durra): (*a*) Fromme Stunde, (*b*) Erhebung. Four Songs (Wendland): (*a*) Abend, (*b*) Fliegende Seide, (*c*) Legende, (*d*) Mädchen und Madonna. Six Songs (Arndt): (*a*) Und der Regen fällt, (*b*) Trennen ist ein Sterben, (*c*) Und weil ichs keinem Menschen sag', (*d*) Du jungschönes Mägdlein, (*e*) Küsse kraut, and (*f*) Sonntagsmorgen.
4.40—Weather for Farmers, followed by Review of Books by Women. 5.0—Technical Review. 5.20—Talk for Women: Women's Competition in the Labour Market.
6.0—Concert of Light Music from the Goldone Krone Café. 6.30—Weather and Talk by Dr. Ludwig Marcuse. 7.0—See *Berlin* (*Witzleben*). 9.0—Time and News.
9.30—Concert and Dance Music by the Ali Alexander Band, relayed from "Haus Oberschlesien," *Gleiwitz.* 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.
12.15—1.45 *p.m.*—Weather and *Gramophone Concert.* Selection from "Les Mousquetaires au Couvent" (Varney). Selection from "Werther" (Massenet). Slap and Laugh (Viard). Entry of the Gnomes (Pierné). Ballet Music, Les Deux Pigeons (Messager). Norwegian Dances (Grieg). Aria from "Martha" (Flotow). Selection from "Maître Pathelin" (Bazin). Aria from "The Barber of Seville" (Rossini). Mijn Moedersprak (Benoit). Heeft het Roosje Milde geuren (Benoit). Waltz, Frühlingsstimmen (Johann Strauss). Habanera (Chabrier). Rhapsody, Espana (Chabrier).
5.0—*Concert*, conducted by Jean Kumps, arranged by the Belgian Catholic Radio Society. Schiller

March (Meyerbeer). Selections from "Louise" (Charpentier). Le Dernier sommeil de la Vierge (Massenet). Brabançonne Suite (Sarly). Waltz, Roses of the South (Waldteufel).
5.45—Children's Programme, arranged by the Belgian Catholic Radio Society. 6.20—Literary Review.
6.30—*Gramophone Concert.* Selection from "Phi-Phi" (Christiné). Selection from "La Mascotte" (Audran). Duet from "La petite mariée" (Lecocq). Foxtrot, Emilienne (Oberfeld). Foxtrot, C'est pa . . . pa . . . Parisien (Oberfeld). Onestep, Ali-Baba's Camel (Gay). Foxtrot, If I ever lost you (Payne). Oh Rumba Rumba (Dax). Foxtrot (Escobar). Polka, My Native Village (Komzák). Waltz (Nyvelt). Tango, A Night in Monte Carlo (Heymann). March, The Boys of the Navy (Heymann). 7.15—Catholic Report. 7.30—Programme for Women.
8.0—*Orchestral Concert*, conducted by Meulemans, arranged by the Belgian Catholic Radio Society. Soloists: Joseph Voordecker ('Cello) and Mme. Meunier (Pianoforte). Overture, "Oberon" (Weber). Concerto for 'Cello and Orchestra (Meulemans). 8.45—Talk on Literature.
9.0—*Concert (continued)*—Conte d'Avril (Widor). Aspiration (Dubois). Rhapsodie dahoméenne (De Boeck). Pianoforte Solos: (*a*) Theme with Variations (Paderevsky), (*b*) Ballad (Dupuis), (*c*) Impromptu (Radoux). The Sleep of Endymion (Dame). Waltz, Selection. (Johann Strauss). 10.0—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.
12.15—1.45 *p.m.*—Weather Forecast and Popular Music on Gramophone Records.
5.0—*Concert by the Station Orchestra* conducted by M. Meulemans. Soloist, Franz Schell (Tenor). Programme of Spring Music. March (Filipucci). Waltz, Le réveil du printemps (Scassola). Overture Au Printemps de la Vie (Mouton). Three Tenor Solos. Orchestral Suite, In the Spring (Nevin).
5.45—Programme for Children. 6.30—Concert of Spring Music on Gramophone Records. 7.15—Talk.
7.30—Sports Talk.
8.0—Evening of Spring Music. Soloists: Mlle. Delemarre (Vocalist) and Franz Schell (Tenor).
9.0—*Concert by the Station Orchestra.* Lenteliedje (Candael). Tenor Solo: Song from "The Valkyries" (Wagner). Spring Serenade (Holmes). Rustle of Spring (Sinding) Lentelust (Lebrun). The Nightingale (Saint-Saëns). Jeugd en Liefde (Moeremans). Ballet Music from "The Seasons" (Verdi). Two Tenor Solos: (*a*) Spring (Grieg), (*b*) Song from "The Mastersingers" (Wagner). Waltz (Johann Strauss). 10.0—Le Journal Parlé.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.
11.0 *a.m.*—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 *noon*—Popular Music on Gramophone Records.
4.0 *p.m.*—Light Music and Romanian Music by the Motzoï Orchestra.
5.0—News and Time Signal. 5.10—Concert by the Motzoï Orchestra (contd.). 6.0—Educational Talk.
6.40—Light Music on Gramophone Records.
7.0—*Concert by the Station Orchestra.* Overture, "Iphigenie en Aulide" (Gluck). Concerto for Four Violins and String Orchestra (Vivaldi). Torch Dance (Meyerbeer). 7.30—News Bulletin. 7.45—Song Recital by Mlle. Pia Zguriadesco. 8.5—*Concert by the Station Orchestra (contd.).* Waltz from "Raymonda" (Glazounoff). Andante with variations and String Orchestra (Weber). Selection from "André Chenier" (Giordano). 8.15—News and Close Down.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW.
8.15—Concert by the Budapest Concert Orchestra. 10.10—Tidal Report. 11.0—Chimes.
11.5—*Vocal and Instrumental Concert.* Soloists: Alice Renyves (Violin), Josef Lux (Vocalist) and T. Polgár (Pianoforte). Violin Solos: (*a*) Largo (Veracini), (*b*) Rondo (Schubert). Die zwei Grenadiere (Schumann). Song of the Bride (Rimsky-Korsakoff). Violin Solos: (*a*) Improvisation (Bloch), (*b*) Allegro (Fiocco). Two Songs (Kacsoh). Romance (Hubay), Les fileuses (Hubay). Songs: Elegie (Massenet), Drinking Song from "Bank Ban" (Erkel).
3.0—Programme for Women. 4.0—Programme by Koloman Szücs.
4.30—Recital of Hungarian Songs by the Workers' Choral Society, conducted by Karl Müller. 5.15—French Lesson. 5.45—Concert by the Elemér Sáray Cigány Band.
6.45—Programme by Ladislas Szabos
7.15—11.0—Also on 210 metres.
7.15—Concert by the Royal Hungarian Opera House Orchestra, conducted by Otto Berg, Soloist: Lili Berg. Overture, "The Mastersingers" (Wagner). Capriccio (Esterházy). Variations on a Lively Theme (Zador). Italian Symphony in A Major (Mendelssohn).
8.45—News and Announcements, followed by Concert from the Café Ostende, with Paul Kalmar (Vocalist). Light Music and Dance Music.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.
See *Langenberg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).
6.30 *a.m.*—Gymnastics. 7.30—Service from the Cathedral. 10.0—Weather Forecast. 10.10—Angling Notes. 11.0—Town Hall Chimes.
11.2—1.0 *p.m.*—Concert from the Hotel d'Angleterre.
2.0—*Concert by Otto Fessel's Instrumental Ensemble.* Overture, "Les Saltimbanques" (Ganne). Pomona Waltz (Lumbye). Selection from "The Little Princess" (Rygaard). Spring Song (Mendelssohn). Dumka and Cracovienne from "Polenblut" (Nedbal). Sefira (Siede). Reading (Karl Larsen). Radetzky-March (Johann Strauss, Sen.). Masquerade Suite (Lacome). Waltz, Siesta (Waldteufel). The Nigger's Dream (Myddleton). Resignation (Neupert). Amager-Polka (Lumbye).
4.0—Programme for Children. 4.40—Exchange Quotations and Fish Market Prices. 4.50—Gardening Talk. 5.20—Elementary German Lesson. 5.50—Weather Forecast.
6.0—News Bulletin and Report of the Danish Radio Club. 6.15—Time Signal. 6.30—Talk: The Importance of Technical Schools for Young People. 7.0—Town Hall Chimes.
7.2—"*The Hansen Family*"—Humorous Episode (Jens Locher).
7.15—Concert of Jazz Music by the Pianists Witt, Carr and Reed. Ein Freund, ein guter Freund, from "Die zwei von der Tankstelle" (Heymann). Dream Lover. Ach wie süss ist dein Mund. The Blue Room. Selection from "White Horse Inn" (Benatzky). Selection from "Congress Dances" (Heymann). Ish weiss nicht zu wem ich gehöre. I kiss your little Hand, Madame. Interlude: Programme of Jazz Songs on Gramophone Records: (*a*) Close your eyes (Carter and Tennet), by the Three Ginx, (*b*) Selection from "Wonder Bar" (Katscher, Farkas and Herezeg) by Die Abels, (*c*) Selection from "Bombes sur Monte Carlo" (Heymann) by the Comedian Harmonists, (*d*) The King's Horses (Gay and Graham) by the Big Four, (*e*) Paso doble (Santeugini) by the Comedian Harmonists. Waltz, The Blue Danube (Johann Strauss), arranged for Jazz. Ich hab' dich einmal geküsst. Titte til hinanden (Normann Andersen). Potpourri of Sound Film Melodies. Alabamy Bound. España Waltz arranged for Jazz (Waldteufel).
8.30—Talk: Æsthetic Problems and Politics. 9.0—News Bulletin.
9.15—*Concert from the Works of Schulz and Weyse by the Radio Orchestra* conducted by Launy Gröndahl. Soloist: Sylvia Schierbeck (Vocalist). Overture and Ballet Music from "Indtoget" (Schulz). Lieder im Volkston (Schulz): (*a*) Trackfuglen, (*b*) Landliv, (*c*) Vuggevise, (*d*) Til Naturen, (*e*) Indbydelse. Overture, "Et Eventyr i Rosenborg Have" (Weyse). Songs (Weyse): (*a*) Drengen fandt en Rose staa, (*b*) Danser Maien skjön imöde, (*c*) Hvor sig Dagen langsomt sniger, (*d*) De klare Bölger rulled. Overture, "Sovedrikken" (Weyse) 10.5 (approx.)—Close Down.

CRACOW (Poland)

959 kc/s (312.8 m.); 1.5 kW.
10.45 *a.m.*—Press Review. 10.58—Time Signal, Bugle Call from St. Mary's Church and Programme Announcements. 11.10—Light Music on Gramophone Records.
12.10 *p.m.*—Weather and Economic Report. 2.25—3.40—See *Warsaw*.
3.40—Popular Music on Gramophone Records. 4.10—Talk. 4.35—See *Warsaw*. 5.50—Miscellaneous Items and News.
6.10—Talk: The Influence of India on Europe. 6.25—Programme Announcements. 6.30—Light Music on Gramophone Records. 6.45—Radio Journal.
7.0—9.40—See *Warsaw*. 9.40—News Bulletin. 9.55—Concert of Light Music and Dance Music. 11.0 (approx.)—Close Down.

TUESDAY
continued

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).
1.30 *p.m.*—Time Signal, Weather Report, Stock Report and Light Music on Gramophone Records.
2.0—6.0—Interval. 6.0—Popular Music on Gramophone Records.
6.15—Programme for Children. 7.0—Light Music on Gramophone Records. 7.20—News and British Market Report. 7.30—Time Signal.
7.31—Gaedhilg. 7.45—Travel Talk.
8.0—Selections by the Station Sextet. 8.20—Songs by Florence Howley (Contralto). 8.35—Violin Solos by Nancie Lord. 8.50—Songs by Frank Cowle (Baritone).
9.5—Cornet Solos, by T. P. McCurtin. 9.15—Songs by Mollie Phillips (Soprano). 9.30—Sponsored Programme. 10.30—Time Signal, News Weather Report and Close Down.

FÉCAMP (France)

Radio Normandie. 1,364 kc/s (219.9 m.); 1 kW.
Transmits at intervals from 12 *noon*.
7.30 *p.m.*—Popular Music on Gramophone Records. 7.45—News Bulletin. 8.0—Gramophone Records of Popular Music.
8.15—Late News Bulletin. 8.30—Le Havre Review, followed by Concert relayed from Le Havre.
12 *midnight*—Concert of Dance Music. 1.0 *a.m.* (*Wednesday*) (approx.)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by *Cassel*, 1,220 kc/s (246 m.)
Transmits at intervals from 5.15 a.m.
4.0 *p.m.*—*Concert by the Station Orchestra*, conducted by Reinhold Merten. Soloist, Anita Sievert (Soprano). Prelude to Act II. of "Die Königskinder" (Humperdinck). Soprano Solos: Selections from "Der Kobold," "Sonnenflammen" and "Der Heidenkönig" (Siegfried Wagner). Prelude to the First Act of "The Feast on Solhaugen" (Pfitzner), followed by Dance Music, conducted by Walter Caspar.
5.30—Economic Notes. 5.40—10.30—See *Stuttgart*. In the intervals at 6.30 and 9.30—Time, Weather and News. 10.30 (approx.)—Close Down.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.); and *Kiel*, 1,292 kc/s (232.2 m.).
Transmits at intervals from 5.30 a.m. (Weather and Concert).
10.0 *a.m.*—*Gramophone Concert of Potpourris.* Mozart Potpourri. From Old Operas. From Verdi's Operas. Offenbach Operetta Potpourri. "Lilac Time" (Schubert-Berté). "Die Fledermaus" (Strauss). Folk Song Potpourri. "Paganini" (Lehár). Popular Song Potpourri, Request Music of 1931 (Mohr).
11.10—Time, Weather and Winter Sports Notes. 11.20—Exchange Quotations.
11.30 (from *Bremen*)—*Orchestral Concert.* Waltz, Künstlerleben (Strauss). Ave Maria (Bach-Gounod). Minuet for Violin Mozart). Pizzicato Serenade (Brase). Suite, From Southern Spheres (Fresco).
12.15 *p.m.*—Sponsored Programme.
1.0—Ice Report and News. 2.0—Weather Report. 2.5—Exchange Quotations. 2.35—Shipping Report.
3.0 (from *Hanover*)—Review of Books—New Books about Goethe. 3.30 (from *Hanover*)—Talk: The Post and the Press. 3.55—Talk by Dr. Moll.
4.20—Variety Programme. 5.30—Dialogue: Handball or Football?
5.55—Talk: India's Precious Metals and their Economic Importance.
6.20—Exchange and Market Prices.
6.25—Weather Forecast. 6.30—Herbert Eulenberg reads from his own Works.
7.0—"The Count of Luxembourg" Operetta in Three Acts (Lehár).
9.30—News Bulletin. 9.50—Topical Talk.
10.0—Concert by the Little Norag Orchestra, conducted by Gerhard Maasz. Soloists: Gerhard Gregor and Gerhard Maasz (Pianists). Marche militaire (Saint-Saëns). Waltz, Juristenball (Johann Strauss). Overture, "Turandot" (Weber). Slavonic Dance No. 12 (Dvorak). Selection from "Le Bourgeois Gentilhomme" (Richard Strauss). Dance Scene (Nielsen). Dances for Two Pianofortes (Gerhard Maasz). Egyptian March (Oscar Straus). Serbian Melodies (Gál). Cradle Song (Kircka). Catalan Rhapsody (Ailbout). Carmen March (Bizet-Beck). 10.20 (in an interval)—Ice Report.

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).
Transmits at intervals from 6.0 a.m. (Gramophone Concert).
11.0 *a.m.*—*Concert by the Königsberg Opera House Orchestra*, conducted by Karl Hrubetz. March, Furchtlos und treu (Fucik). Ouverture Monumental (Dicker). Spanish Waltz, The Belles of Andalusia (Schneider-Bobby). Opera Melodies (Weber). Overture, Vasantaseno (Hanse). Potpourri, Walzertrümpfe (Robrecht). Kronen zerfallen (Schmidt-Hagen). Onestep, Wo ist Coletti? (Seidler-Winkler). Potpourri, Alles singt mit (Recktenwald). Valse Caprice, Meeresleuchten (Urbach). Siamese Bridal Procession (Löhrt). Potpourri, From the Rhine to the Danube (Rhode). March, Gruss an Karlsruhe (Krantz).
2.45 *p.m.*—Rhythmic and Musical Improvisations.
3.15—*Concert by the Orag Orchestra*, conducted by Eugen Wilcken. Overture, "Die schöne Galathée" (Suppé). Souvenir de Capri (Becce). An den Ufern des Hoanghos (Könisberger). Waltz, The Wedding of the Winds (Hall). Suite, Aus dem Nordland (Frederiksen). Fantasia on the Works of Auber (Urbach). 'Cello Solos: (*a*) Musette (Offenbach), (*b*) Morceau antique. Waltz from "Gipsy Love" (Lehár). Selection from "Der Bettelstudent" (Millöcker).
4.50—Talk: Work in the Bees' Colony. 5.15—Jcâ Report and Market Prices. 5.30—Talk on Social Insurance.
6.0—Programme to be announced.
6.30—Dialogue: Utopias of Yesterday—Technique of To-day. 6.55—Weather Forecast. 7.0 till Close Down—See *Berlin* (*Witzleben*).

HILVERSUM (Holland)

160 kc/s (1,875 m.); 8.5 kW. (transmitted from *Huizen*).
Programme of the Algemeene Vereeniging Radio Omroep (A.V.R.O.). 7.40 *a.m.*—Time Signal.
7.41—Variety Music on Gramophone Records. 9.40—Daily Service. 9.55—Popular Music on Gramophone Records.
10.10—*Concert.* Annie de Zeeuw-Slierendrecht (Soprano) and Rosa van Hessen (Pianoforte). Accompanist: Egbert Veen. Pianoforte Solos: (*a*) La Fleurie ou la tendre Nanette (Couperin), (*b*) Polonaise (Bach). Soprano Solos: (*a*) Care salve (Händel), (*b*) Allelujah (Mozart). Pianoforte Solos: (*a*) Rhapsody Op. 79 No. 1 (Brahms), (*b*) Ballad Op. 118 No. 3 (Brahms). Soprano Solos (Grieg): (*a*) The Princess, (*b*) Letzter Frühling, (*c*) Im Kahne. 10.40—Talk. 11.10—*Concert (continued).* Pianoforte Solos: (*a*) Berceuse, Op. 57 (Chopin), (*b*) Etude, Op. 25 No. 7 (Chopin). Soprano Solos (Massenet): (*a*) Sérénade du passant, (*b*) Elegy, (*c*) A la dépassée. Pianoforte Solos (Chaminade): (*a*) Creole Dance, (*b*) Pierrette. Soprano Solos: (*a*) De gefopte vogelaar (v. Rennes), (*b*) Als de ziele luistert (v. Rennes), (*c*) Van't Maseurken (Hullebroek).
11.40—Time Signal. 11.41—Concert relayed from the "Tanz Klause," Bellevue. 1.40—2.10 *p.m.*—Interval.
2.10—A Radio Play. 3.40—Russian Song Recital by Madame Grondijs.
4.10—Concert by a Children's Choir, conducted by Jacob Hamel. 4.40—Popular Music on Gramophone Records.
4.55—Concert by Kovacs Lajos and his Orchestra, with Songs by Bob Scholte. In the interval—Gramophone Records of Variety Music.
6.10—Talk arranged by the People's Radio University (R.V.U.): Music and Philosophy.
6.40—Ravel Concert, with Introductory Talk. Soloists: Louise van Wijngaarden (Violin) and Elsa Nolthenius (Pianoforte). Sonata for Violin and Pianoforte. Tziganе-Rhapsody for Violin and Pianoforte.
7.10—Talk. 7.40—Time Signal.
7.41—*Orchestral Concert*, conducted by Nico Treep. Selection from "White Horse Inn" (Benatsky). La Mousmée (Ganne). The Clock and the Dresden Figures (Ketelbey). Selection (Benatzky). Waltz, Leichtes Blut (Johann Strauss).
8.10—A Radio Play.
8.40—*Concert, conducted by Nico Treep.* Soloist: Herman Leydensdorff (Violin). Overture, "La princesse janne" (Saint-Saëns). Havanaise for Violin and Orchestra (Saint-Saëns). Songs. Allegro non troppo and Andante from the Spanish Symphony (Lalo). Songs. Overture, "Phèdre" (Massenet).
9.40—Weather and News.
9.55—*Concert, conducted by Nico Treep.* Marche lorraine (Ganne). Waltz from "The Count of Luxembourg" (Lehár). Potpourri (Borchert). In a Persian Market (Ketelbey). Waltz Potpourri (Robrecht). Felix the Cat (Kark). A.V.R.O. March (Treep).
10.40—Gramophone Records of Variety Music. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

1,004 kc/s (298.8 m.); 8.5 kW. (transmitted from *Hilversum*).
7.40 *a.m.* till Close Down.—Programme of the Catholic Radio Society (K.R.O.). 7.40—8.55—Variety Music on Gramophone Records. 9.40—Popular Music on Gramophone Records. 11.10—Religious Address. 11.40—Police Notes.
11.55—*Trio Concert* conducted by Piet Lustenhouwer. Lunch March (de Jong). Bin nur ein Jonny (Abraham). Waltz from "Lysistrata" (Lincke). Unter vier Augen (Stolz). Potpourri, Musikalische Seifenblasen (Urbach). Kiss me Goodnight (Nicholls). Potpourri, Major and Minor (Schreiner). Das wär' herrlich! (Benatzky). Waltz from "Der Rosenkavalier" (Richard Strauss). Flower Song (Lange). Ludovico (Fall).
1.25 *p.m.*—Popular Music on Gramophone Records. 1.40—Programme for Women. 2.40—3.40—Dressmaking Lesson. 4.5—Intermediate Dressmaking. 4.40—*Concert conducted by Piet Lustenhouwer.* Overture, "Il Seraglio" (Mozart). Ochsenmenuett (Haydn). Concert Waltz (Lander). Mazurka (Lander). Offenbach Potpourri (Urbach). Jenny (Poepping). Klänge aus Rumänien (Dauber). Fantasia, The Vision of Salome (Lampe). Piazza del Popolo (Frederiksen). Spanish Dances (Moszkovsky). Dornröschens Brautfahrt (Rhode).
6.25—*English Lesson.* 6.50—Religious Address on Easter. 7.10—Police Notes. 7.25—Talk.
7.40—Havdn Concert, conducted by Johan Gerritsen. Soloists: Ankie van Wickevoort Crommelin (Soprano). Louis van Tulder (Tenor), Louis Somer (Violin), Marinus van 't Woud ('Cello) and Willy François (Pianoforte). Introductory Talk. Andante from the Emperor Quartet. Trio, No. 1, for Pianoforte, Violin and 'Cello. Recitative and Cavatina for Tenor from "The Seasons." Symphony No. 88 in G Major. Gramophone Record: Concerto in D Major for 'Cello and Orchestra. The Echo, for Strings. Allegro moderato and Minuet from the Octet for Wind Instruments in F Major. Tenor and Soprano Duet from "The Seasons." Cavatina, Recitative and Aria, Partita. Selection from "The Creation."
10.40—Popular Music on Gramophone Records. 11.40 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See *Copenhagen*.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
Transmits at intervals from 5.45 a.m. (Exercises, Weather, Time and Gramophone Concert).
11.0 *a.m.*—*Gramophone Concert.* Overture, "Susanna's Secret" (Wolf-Ferrari), by the Orchestra of the Milan Scala, conducted by Ettore Panizza. Waltz, Weaner Madln (Ziehrer), by the Vienna Philharmonic Orchestra, conducted by Clemens Kraus. Selection from "Undine" (Lortzing) by Marcel Wittrisch (Tenor). Fantasia on the Works of Tchaikovsky (Urbach) by Marek Weber and his Orchestra. La Capinera (Benedict) by Amelita Galli-Curci (Soprano). Koboldspiele in der Johannisnacht (Homann-Webau) by Ferdy Kauffman and his Orchestra. Tango (Albeniz—Kreisler) by Fritz Kreis-

ler (Violin), Selections from "Der Tenor der Herzogin" (Künneke) by Marek Weber and his Orchestra. Parade der Zündhölzchen (Wehle) by Sidney Gustard (Organ). Paso doble (Santeugini) by the Comedian Harmonists.
11.50—Weather, Announcements and Time Signal. 12 *noon* (also relayed by *Zeesen*, 31.38 m., from 1.0 p.m.)—*Concert conducted by Wolf*. Prelude, "Hansel and Gretel" (Humperdinck). Andante cantabile (Tchaikovsky). Selection from "Boris Godounoff" (Moussorgsky). Ballet Music from "Faust" (Gounod). Rococo (Derksen). Military Burlesque (Clemus). Ballet Overture (Lincke). Waltz, Zwei Herzen und doch nur eins (Richter). Gallop, Prestissimo (Waldteufel).
2.30—Economic Notes and Time Signal. 2.50—Talk for Girls. 3.20—Talk: The English Theatre. 3.40—Talk for Women: The Destiny of Womankind in Indian Literature.
4.0—Concert. 5.15—Agricultural Talk. 5.40—Talk: Artists and their Patrons. 6.0—Weather, Time, Economic and Sports Notes. 6.15—Wireless Notes. 6.30—Talk: The Insurance of Ex-Servicemen. 6.55—First News. 7.0—The World on Gramophone Records—Florence.
7.45—"An Everyday Occurrence."—Radio Play (Rudolph Brook).
9.0—News Bulletin and Silent Night.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.). Transmits at intervals from 5.30 a.m.
3.30 *p.m.—Concert by the Leipzig Symphony Orchestra, conducted by Hilmar Weber*. Eleven Viennese Dances (Beethoven). Biedermeier—Serenade, Op. 28 (Fritz Cortolezis). Entr'acte Music from "Die drei Pintos" (Weber). Overture, The Hebrides (Mendelssohn).
4.30—Weather and Time. 4.50—Economic Notes. 5.5—Talk for Women: My Working Day—my Week End. 5.30—French Lesson. 5.50—Talk (to be announced). 6.0—Reading (Albrecht Schaeffer).
6.30—*Johann Strauss Concert on Gramophone Records*. Overture, "Der Waldmeister." Melodies from "The Gipsy Baron" Waltz, Frühlingsstimmen. Mazurka, Frauenherz. Finale from the Second Act of "Die Fledermaus." 7.0—See *Berlin (Witzleben)*. 9.5—News Bulletin, followed by Dance Music. 10.30 (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.
11.15 *a.m.*—Light Music on Gramophone Records. 11.45—News Bulletin. 12 *noon*—Time Signal and Popular Music on Gramophone Records.
4.30 *p.m.*—Reading of Stories. 5.0—Orchestral Concert. 6.0—German Lesson. 6.30—Talk on the History of Art. 7.0—Educational Programme. 7.30—Concert relayed from *Zagreb*, 977 kc/s (307 m.). 9.30—Time Signal and News Bulletin.

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.
10.45 *a.m.*—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—Light Music on Gramophone Records.
12.10 *p.m.*—See *Warsaw*. 2.0—Popular Music on Gramophone Records. 2.15—See *Warsaw*. 2.20—A Gramophone Record. 2.25—See *Warsaw*. 3.40—Popular Music on Gramophone Records and Topical Talk. 4.10—See *Warsaw*. 5.50—Miscellaneous Items. 6.15—Literary Talk. 6.30—See *Warsaw* 8.45—Answers to Correspondents. 9.0—See *Warsaw*. 9.50—Dance Music relayed from the "Szkocka" Café. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT) 644 kc/s (465.8 m.) 1.5 kW.
8.0 *a.m.*—Relay from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 10.0—Orchestral Concert.
1.0 *p.m.*—Concert by the Station Orchestra. 4.30—Instrumental Concert. 7.0—Light Music on Gramophone Records. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Concert by the Don Cossacks Choir.

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.
8.0—9.0 *a.m.*—Topical Review. 11.45—Astronomical Report and Culinary Talk.
12 *noon*—Chimes, Announcements, Labour Market Report and Theatre Guide, followed by a *Concert by the Station Sextet*. Overture, "Hansel and Gretel" (Humperdinck). Fantasia on The Marseillaise (Caballero). Selection from "La Bohême" (Puccini). Beau Soir (Debussy). Cinema Review. Algerian Suite (Saint-Saëns). Gavotte (Bach).
3.20—News, Radio Journal and Programme Announcements. 3.30 Interval. 7.0—Chimes, Exchange Quotations, Market Prices and Request Gramophone Concert. 7.30—Talk and Gramophone Concert (contd.). 8.15—Announcements and Radio Journal. 8.30—Interval. 9.0—French Lesson on Linguaphone Records.
9.30—Chimes, Time Signal, Radio Journal and Selections from "*Rigoletto*" (Verdi) on Gramophone Records. 11.45—News and Radio Journal. 12 *midnight*—Chimes and Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*.

MUNICH (Germany)

563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.); and *Nürnberg*, 1,256 kc/s (239 m.).
Transmits at intervals from 5.45 a.m.
4.0 *p.m.—Orchestral Concert* conducted by Karl List. Soloist: Theodor Blanck (Tenor). Overture, "The Force of Destiny" (Verdi). Italian Caprice (Tchaikovsky). Waltz from "Hansel and Gretel" (Humperdinck). Canzone and Bolero (Oscar Straus). Tenor Solos: (*a*) Aria from "La Tosca" (Puccini), (*b*) Song (Mascagni). A Japanese Carnival (Basque). Intermezzo, Am Colorado (Jessel). Selection from "Der Tenor der Herzogin" (Künneke). Schweitzer Schützengilde (Zimmer).
5.0 (from *Nürnberg*)—A Visit to a Furniture Remover. 5.25—Weather and Agricultural Notes. 5.35—Talk: The Lower Silesian Frontier.
5.55—Talk: Germans in Bulgaria. 6.15—*English Language Lesson*. 6.45—New Gramophone Records. 7.0—See *Berlin (Witzleben)*.
9.0—"*Vor Sonnenuntergang*"—Thoughts on Gerhart Hauptmann's New Play. 9.20—Time and News.

OSLO (Norway)

Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.); *Porsgrund*, 662 kc/s (453.2 m.); and *Rjukan*, 671 kc/s (447.1 m.).
Transmits at intervals from 10.10 a.m.
4.0 *p.m.*—Gramophone Records of Classical Music. 4.20—Talk (to be announced). 4.40—Accordion Recital of Popular Music. 5.0—Talk for Housewives. 5.45—Balalaika Recital of Russian Songs and Dances.
6.0—Announcements, Weather and News Bulletin. 6.30—Talk relayed from *Trondheim*, 608 kc/s (493.4 m.).
7.0—Time Signal. 7.1—A Play (Vilhelm Krag), relayed from *Christiansand*, 1,274 kc/s (235.5 m.).
8.10—Political Review. 8.40—Weather and News Bulletin. 9.0—Topical Talk. 9.15—Talk (to be announced).
9.45—Concert by the Lillevik Quartet. 10.15 (approx.)—Close Down.

PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW.
Transmits at intervals from 11.45 a.m.
5.0 *p.m.*—Light Music on Gramophone Records. 5.30—7.0—Interval.
7.0—Announcements, Radio Giornale dell'Enit, Agricultural News and Announcements. 7.20—*English Lesson* on Gramophone Records. 7.25—Light Music on Gramophone Records. 7.45—Time Signal and Announcements.
8.0—Relay of an Opera from the Teatro Massimo Vittorio Emanuele. Talk and Notes on Art in the Intervals. 9.55—Late News Bulletin.

PARIS (France)

Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW.
Time Signals (on 2,650 m.) at 9.26 a.m. and 10.26 p.m. (preliminary and 6-dot signals).
5.45 *p.m.*—Le Journal Parlé. 7.20—Weather Forecast.
7.30—*Pianoforte Recital with Introductory Talk: French Music from the Seventeenth Century to the Present Day*. Caprice à cinq temps (Bordes). Selections (de Séverac): (*a*) Baigneuses au soleil, (*b*) Coin de cimetière au printemps, (*c*) A cheval dans la prairie.
8.0—*Quartet Concert*. Four Novelettes (René Jullien): (*a*) Prelude lento serioso, (*b*) Alla spagnola, (*c*) Intermezzo, (*d*) Scherzo. The Harp Quartet No. 10 (Beethoven).

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.
12 *noon*.—Gramophone Records, News and Announcements. 12.15—Variety Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Gramophone Records, Talks and News. 7.30—Popular Music on Gramophone Records. 8.30—Gramophone Records, Talks and News.
8.45—*Vocal and Orchestral Concert*. Overture (Dvorak). Waltz, Wienerblut (Joh. Strauss). Poem, Boabdil (Sporck), conducted by the Composer. Pastorale variée for Wind Instruments (Pierné). Allegro appassionato (Lalo). Cortège nocturne (Sylvio Lazzari). First Orchestral Suite: Histoires (Ibert). Old Czech Polka (Hilmar). Marche Militaire (Saint-Saëns).
10.45—News Bulletin. 10.50 (approx.)—Close Down.

PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.
6.45 *a.m.*—Physical Culture Lesson. 7.30—Weather and Physical Culture (continued). 7.45—Variety Music on Gramophone Records. 8.0—News, Weather and Press Review.
12.30 *p.m.—Chamber Music Concert on Gramophone Records*. Allegro from the Quartet (Honegger), by the Krettly Quartet. Guitar Solos (Torroba): (*a*) Preludio, (*b*) Fandanguillo, by Andrès Segovia. L'eau qui court (Georges), by Mme. Cesbron-Viseur. Soir de Printemps (Bernheim), by Marthe Nespoulous. Pianoforte Solos by Marius François (Debussy): (*a*) Soirée dans Grenade, (*b*) Jardins sous la pluie. Songs by Chaliapin:

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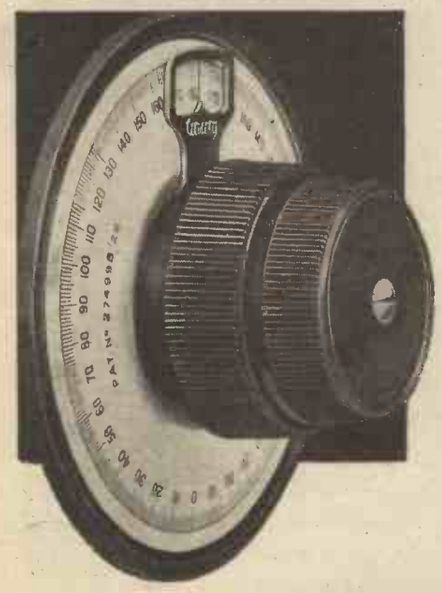

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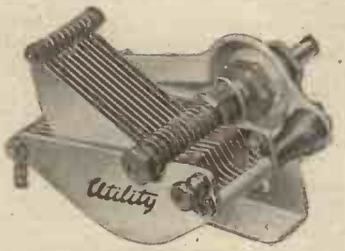

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Raimond

(*a*) Death and the Maiden (Schubert), (*b*) Der Doppelgänger (Schubert), (*c*) The Two Grenadiers (Schumann), (*d*) Midnight Review (Glinka). Trio for Pianoforte, Oboe and Clarinet (Poulenc). In the intervals at 1.0—Exchange, News and Weather, at 1.30—Exchange, and at 2.0—Exchange and Announcements.
3.45—Exchange and Market Prices. 6.30—Exchange, Weather, Agricultural Report, Market Prices and Racing Results. 7.0—Theatre Notes. 7.15—Talk on Art by Léon Rosenthal: The Museum at Lyons.
7.30—*Gramophone Concert.* Foxtrot (Green). Blues (Sarony). Douce France (Demon). Chinese Serenade (Siede). 7.45—*British Press Review*, Commercial Prices and News. 8.0—Variety Programme with Popular Belgian Sketches. 8.30—News and Weather. 8.40—Review by Pierre Scize.
8.45—"Le Grand Mogol"—Opera (Audran), with the collaboration of Suzanne Cély, Henriette Lebard, MM. Delaquerrière, Derroja and Robert Caza. The Orchestra conducted by Raoul Labis. In the interval at 9.15—Press Review and News.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; *Lausanne*, 442 kc/s (680 m.); and *Geneva*, 395 kc/s (760 m.).
Transmits at intervals from 11.30 a.m.
6.1 *p.m.* (from *Lausanne*)—Cinema Organ Recital relayed from the Capitole Theatre. 6.30 (from *Lausanne*)—German Lesson. 6.55—Announcements. 7.0 (from *Geneva*)—Scientific Talk. 7.20 (from *Geneva*)—Poetry Reading by Jane Falquet.
7.30 (from *Geneva*)—Concert by the Station Orchestra. In the interval at 8.15 (approx.)—Weather and News. 9.25 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW.
Transmits at intervals from 10.30 a.m.
6.0 *p.m.*—Weather Report.
6.5—Spring Concert. Rustle of Spring (Sinding). Retour du Printemps (Waldteufel). Spring Song (Mendelssohn). Songs: (*a*) The Spring (Hildach), (*b*) Frühlingstraum (Schubert), (*c*) Frühlingslied (Schumann), (*d*) The Spring (Hugo Wolf). Waltz, Frühlingstimmen (Johann Strauss). Songs: (*a*) First Flowers of Spring (Grieg), (*b*) The Spring (Garuts), (*c*) Letzter Frühling (Grieg). The Spring (Gounod). Waltz, Enfants du Printemps (Waldteufel). 8.0—Weather Report. 8.5—*Concert (contd.)*. Spring Festival (Thomas). Scènes de Ballet from "Hamlet" (Thomas).
8.35—Old Dance Music. 9.0—Modern Dance Music. 10.0 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (1RO). 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.) and 2RO, 3,750 kc/s (80 m.).
7.15—7.30 *a.m.*—Giornale Radio and Announcements. 11.0—Gramophone Records of Light Music. 11.35—Weather Report.
11.45—*Vocal and Orchestral Concert.* Soloists: Flavio Dorini (Tenor) and Maria Flori (Violin). Tenor Solos: (*a*) Tra le pieghe dell'abito rosa (Cecconi), (*b*) Ninna Nanna (Ravasenga), (*c*) Roma lontana (Macchini). Violin Solos: (*a*) Adagio religioso (Vieuxtemps), (*b*) Ronde des Lutins (Bazzini). Ballet Suite, La Source (Delibes). Romance No. 5 (Tchaikovsky). Hungarian Dance No. 7 (Brahms). Alle damine del XVIII secolo (Carabella). Quintet from "The Mastersingers" (Wagner). L'amore è un tango (Ranzato). A Wedding Procession in Lilliput (Translateur). In the intervals at 12.15 *p.m.*—Giornale Radio and Exchange and at 12.30—Time and News.
1.0—4.0—No Transmission. 4.0—Exchange, Programme for Children, Giornale Radio and Announcements.
4.30—*Soprano and Bass Song Recital* by Maria Baratta and Guglielmo Bandini. Duet from "La cambiale di matrimonio" (Rossini). Duet from "La scala di seta" (Rossini). Duet from "Il campanello di notte" (Donizetti).
4.45—*Concert of Variety Music.* Tales from the Vienna Woods (Johann Strauss). Anja (Wit). Bonita (Mezzacapo). Banjo (Dax-Crazi). Piccola Mariu (Simi). Signora ci diamo del tu? (Fragha).
5.15—Giornale dell'Enit. 5.55—(from *Naples*)—Shipping News and Sports Notes. 6.0—Lesson in Morse, Agricultural Report, Weather, Announcements, Giornale Radio and Press Review. 7.0—Time and News. 7.5—Talk on Hungary. 7.15—Gramophone Records of Variety Music. 7.30—Sports Notes and Announcements.
7.45—Concert. Antiche danze ed arie, for Lute, arranged for String Quartet (Respighi): (*a*) Italiana, (*b*) Danze di Corte, (*c*) Siciliana (Besardo), (*d*) Passacaglia (Roncolli). Duets for Two Sopranos by Virginia Brunetti and Maria Soccorsi: (*a*) O mirate che portenti (Carissimi), (*b*) Notturno a due voci (Rossini), (*c*) Duet from "L'étoile du Nord" (Meyerbeer). Miniature Fantasia on American Themes for Two Violins, Viola and 'Cello (Janssen).
8.45—"*Le illusioni di prima e di poi*"—Comedy (de Stefani). 9.15—*Concert (continued).* Selection from "Tre commedie goldoniane" (Malipiero). Symphonic Poem for Pianoforte and Orchestra, Les Djinns (C. Franck). Scherzo from the Symphony in Classical Style (Pizzini). Review of Reviews. Soprano and Baritone Duet from "Il Tabarro" (Puccini) by Ofelia Parisini and Guglielmo Castello. 9.55—News Bulletin.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.), and by W2XAD on 15,340 kc/s (19.56 m.).
Transmits at intervals from 11.45 a.m.
9.0 *p.m.*—Bridge Lesson by Ralph C. Blessing. 9.30—Stock Reports and Police Notices. 9.45—Banjoleers. 9.55—News Bulletin. 10.15—"Skippy," from *New York*. 10.30—Garden Melodies, from *New York*. 10.45—Annette McCullough (Crooner), from *New York*.
11.0—"Joe and Eddie." 11.15—New Kenmore Orchestra. 11.29—Time Signal. 11.30—With Gray McClintock in the Canadian Northwest. 11.45—Musical Programme from *New York*. 12 *midnight*—(WGY only)—General Electric Programme. 12 *midhight* (W2XAF only)—Stock Reports and News Items.
12.15—4.0 *a.m.* (*Wednesday*).—*New York* Relay. 12.15—Campbell's Orchestra. 12.30—Prince Albert Quarter Hour. 12.45—Trials of the Goldbergs. 1.0—Blackstone Plantation. 1.30—True Story Hour. 2.0—McKesson Musical Magazine. 2.30—The Fuller Man.
3.0—Lucky Strike Dance Hour. 4.0—Freddy Engel and his Orchestra. 4.30—Jack Miles and his DeWitt Clinton Orchestra. 5.0—Zimm (Organist), from the Palace Theatre, *Albany*. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BERO-MÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).
11.28 *a.m.*—Time Signal from the Neuchâtel Observatory. 11.30—Weather and News. 11.40—Concert by the Station Orchestra.
12.35 *p.m.*—Weather, and Exchange Quotations. 12.45—2.30—Interval. 2.30—Concert by the Station Orchestra. 3.0—Light Music on Gramophone Records. 4.0 (from *Berne*)—Programme for Women. 4.30—Weather Forecast. 4.35—5.30—Interval.
5.30 (from *Basle*)—Easter Songs to the Lute, by Adelheid Bergmann. 6.0 (from *Basle*)—Elementary Italian Lesson. 6.28—Time Signal and Weather. 6.30 (from *Basle*)—Talk with Readings: The Author, Franz Werfel.
7.0 (from Berne)—Concert of Old-World Chamber Music: Songs by Verena Peschl, with Spinet accompaniment by Hans Auer. Miniaturen des Rokoko (Held), with the Station Orchestra.
8.0 (from *Zürich*)—Concert of Light Music by the Station Orchestra, conducted by Hermann Hofmann. Solo Trombone: Anton Rupa. 9.0—Weather and News. 9.15 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by *Boden*, 244 kc/s (1,229.5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Östersund*, 389 kc/s (770 m.); and *Sundsvall*, 554 kc/s (542 m.).
Transmits at intervals from 6.20 a.m.
4.0 *p.m.*—Accordion Music. 4.30—Reading. 4.45—Variety Music on Gramophone Records. 5.45—Talk in Danish, relayed from *Malmö*, 1,301 kc/s (231 m.). 6.15—Weather and News. 6.30—Talk: Swedish Workers of the Present Day. 7.0—The Practical Corner.

TUESDAY
continued

7.15—*Military Band Concert*, conducted by Per Berg, relayed from *Ubnea*. Potpourri of Swedish National Melodies (Crusell). Waltz, Fata Morgana (Olsson). Fantasia (Pegel). Torna Amore (Buzzi-Peccia). Swedish Suite (Ottoson). Waltz, Idylle Passionelle (Razigade). March. (Berg).
8.15—Legal Talk. 8.45—Weather and News.
9.0—*Concert.* Overture, "Nakiris Hochzeit" (Lincke). Minuet (Sedström). Waltz, Wo die Citronen blühn (Johann Strauss). Gallop (Drigo). Selection (Matry). Tango, Lola (Collazo). 1931 Potpourri (Mohr) 10.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.
11.30 *a.m.*—*Gramophone Concert.* Hungarian Rhapsody in F Major (Liszt). Military March (Schubert). Waltz in A Flat (Liszt). Selection from "Louise" (Charpentier). Pictures from an Exhibition (Moussorgsky-Ravel). Kamarinskaja (Glinka). Old French Marches. Selections (Oberfeld-Willemetry). Selections (Yvain): (*a*) Dans la rue, (*b*) Le même caoutchouc. Un Dia (Montagnou). Je n'saurai jamais dir' ça (Chaput).
12.45 *p.m.*—News in French and German. 1.0—Time Signal.
1.2—*Gramophone Concert.* Overture, Fingal's Cave (Mendelssohn), Selections from "Thais" (Massenet), "Samson and Delilah" (Saint-Saëns), "La Tosca" (Puccini), "Lakmé" (Delibes), "L'Enfance du Christ" (Berlioz), "Rédemption" (Franck). Selection (Richard Strauss). Les Prunes (Daudet). Souviens-toi (Borel-Clerc). Valse lente. Selection from "Le Maschere" (Pedrotti). 2.0—4.45—No Transmission. 4.45—Talk in French.
5.0—*Dance Music.* One-step, The Caravan. I remember you. Foxtrot, Never swat a fly. Tango, Ninetta. Slow Foxtrot, Come to me. If you haven't got love. Waltz, Españita. Foxtrot, The Alpine Milkman. Foxtrot, The Chum Song. Two Blue Eyes and a Tango. Foxtrot, Je ne t'ai vue qu'une fois. Foxtrot, Highway to Heaven. I'll be good because of you. Waltz, J'ai tout quitté pour mon amour. Tie a little string around your finger. Foxtrot, Lies. March, Pour être fort. 6.0—Talk in French: Touring through Lorraine. 6.15—Topical Talk in French.
6.30—*Orchestral Concert*, conducted by Maurice de Villers. Marche française (Filipucci). Ballet égyptien (Luigini). Selection from "The Flying Dutchman" (Wagner). Minuet (Paderevsky). Six Impressions for Pianoforte (Gabriel-Marie). Overture, "Les p'tites Michu" (Messager). 7.30—Time Signal. 7.32—News in French and German.
7.45—*Orchestral Concert.* Marche Grecque (Ganne). Waltz, Eternal Printemps (Popy). Overture, "Jean de Paris" (Boieldieu). Selection from "Les Noces de Jeannette" (Massé). Spanish Dances (Moszkovsky).
8.30 — Concert relayed from Mulhouse. Overture, "The Caliph of Bagdad" (Boieldieu). Serenade (Padilla). Souviens toi (Borel-Clerc). Ballet Music from "Etienne Marcel" (Saint-Saëns). Si vous l'aviez compris (Denza). Tes yeux (Bonincontro). Canzonetta (Pierné). Waltz No. 1 (Durand). Selection from "Cavalleria rusticana" (Mascagni). Selection from "Faust" (Gounod) Selection from "Lilac Time" (Schubert-Berté). Minuet (Porpora-Kreisler). Hungarian Rhapsody (Hubay). Ballet Music from "Coppélia" (Delibes). Waltz, A toi (Waldteufel). Narcissus (Nevin). Waltz in A Major (Brahms). Serenade (Rachmaninoff). 10.30 (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiburg*, 527 kc/s (570 m.).
Transmits at intervals from 5.15 a.m.
9.0 *a.m.*—Gramophone Records of Popular Music. 10.0—News Bulletin. 11.0—Weather and Snow Report. 11.5—Sponsored Concert.
11.35—*Concert by the Bela Sarközi Orchestra*, relayed from the Café Wilhelmsbau. Slavonic Rhapsody (Friedemann). Tango, Nina (Spanetti). Waltz, Secrets of the Adige (Carena). Russian Songs and Dances. Boston, Heute sagst du nein (Voigt). Foxtrot, Confession of Love (Warren). Pianoforte Solo by Jo Knümann. Huguenots-Fantasia (Thalberg). La Serenade (Metra). Hungarian Songs and Czardas (Balasz). Tango, Du, liebst du mich (Kötscher). Rumba, Havana (Chwat). Violin Solo, Rêverie (Vieuxtemps)—Soloist: Béla Sarközi. Boston, Ich habe ein Herz (May). Hungarian Comedy Overture (Kéler-Béla). Marching Song. Neckarmädel (Knümann - Breitler) — Soloist: Hans Hanus. 12.35 *p.m.* (in the interval)—Time, News, Programme Announcements and Weather.
1.30—Elementary Spanish Lesson.
2.0—*Elementary English Lesson.* 2.30—Talk: Flowers. 3.0—Talk: Wilhelm Weigand, on the Seventieth Anniversary of his Birth. 3.30—Talk for Women: Easter Holidays. 4.0—See *Frankfurt*. 5.30—Time and Weather. 5.40—Legal Talk: The Legal Side of Betrothals. 6.5—Talk by a Patent-Agent. 6.30—Time Signal and Agricultural Notes. 6.45—Can you read Goethe?—an Attempt to form a Literary Study Circle between Station and Listeners. VI, Goethe as a Young Man. 7.10—"A Ball in the Kursaal, Cannstatt, in 1790"—a Concert conducted by Gustav Görlich, with Conversational Interludes by Curt Elwenspoek. 8.15—A. M. Frey reads from his own Works. 8.45—Pianoforte Recital by Karol Szreter. 9.30—News, Time, Programme Announcements and Weather. 9.40—Dance Music by the Dance Ensemble of the Stuttgart Philharmonic Orchestra. 10.30 (approx.)—Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.
7.15—11.30 *a.m.*—See *Turin*.
11.30—*Gramophone Records.* Overture, Fingal's Cave (Mendelssohn). Castilian Moon (Longas). El Gaucho (Schipa).
11.40—See *Turin*.
12 *noon*—*Quintet Concert.* In crociera (De Micheli). Cuor di Cuori (Parelli). Badinerie (Attavilla). Selection from "The Merry Widow" (Lehár). L'andalusiana (Carosio). Canta conquita (Barzizza). Ricordo di Capri (Carena).
1.0—3.55 *p.m.*—See *Turin*.
3.55—*Concert.* Soloist: Mareglia (Bass). Overture, "Martha" (Flotow). Bass Solo: In questa tomba oscura (Beethoven). Passeggiata degli eglanti (Ranzato). Bass Aria from "Don Carlos" (Verdi). Selection from "Faust" (Gounod). Bass Aria from "Simone Boccanegra" (Verdi). Nido (Allegra). Waltz, Mein Lebenslauf ist Lieb und Lust (Josef Strauss).
4.50—6.5—See *Turin*.
6.5—*Quintet Concert.* Fortune (Siede). Madrigal (Veronesi). Si vous l'aviez compris (Denza). The Last Tango (Chiappo). Selection, Al tabarin (Malberto). Fiammata d'amore (Solazzi). Waltz, Dolores (Waldteufel).
6.25—*English Lesson on Gramophone Records.* 7.0 till Close Down.—See *Turin*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.); and *Genoa*, 959 kc/s (312.8 m.).
7.15 *a.m.*—Giornale Radio. 7.30—Food Market Prices.
10.15—*Variety Concert.* Selection from "Die schöne Galathée" (Suppé). Danza dei moretti (Bariola). Rhapsody Ballet, A Tale of May (Paulin). Musette (Landry). Just once (Jourmann). Com'è bella giovinezza (Brancucci). Pepita non hai cuore (Mascheroni). Melody in F (Rubinstein).
11.30—Gramophone Records of Variety Music. 11.40—Wireless Talk. 11.45—Giornale Radio. 12 *noon*—Time and Announcements.
12.2—1.30 *p.m.*—*Concert.*—Overture, "Frau Luna" (Lincke). Donauweibchen (Strauss). Selection from "Czar and Carpenter" (Lortzing). A Little Serenade (Grünfeld). Selection from "André Chénier" (Giordano). Ella (Hummer). Potpourri, From Vienna round the World (Hruby). The English Patrol (Asch). Gallop (Drigo). In the interval, Exchange Quotations.
3.15—Giornale Radio. 3.30—Talk for Children; The Life of Andersen. 3.45—Gramophone Records of Variety Music. 3.55—Dance Music from the Savoia. 4.50—Giornale Radio and Announcements. 5.45—Agricultural Notes. 6.0—Announcements.
6.5—*Musical Selections.* Children's Procession (Kostal). Selection (Rodde). Selection from "Riquette" (O. Straus). Serenade (Burgmein).
6.25—*English Lesson* on Gramophone Records. 6.30—Time and Announcements, followed by Gramophone Records of Variety Music. 7.0—Giornale Radio, Weather and Gramophone Records of Variety Music.
7.20—*Musical Selections.* Selection from "Eva" (Lehár). Midnight in Venice (Ranzato). Pardon, Madame, from "Victoria and her Hussar" (Abraham). 7.30—Scientific Talk.
7.45—"Lilac Time"—Operetta (Schubert-Berté). In the intervals: Talk and Literary Notes. Giornale Radio after the Programme.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.); *Innsbruck*, 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.); and *Salzburg*, 1,373 kc/s (218 m.).
Transmits at intervals from 8.20 a.m.
6.15 *p.m.*—Time and News. 6.25—Talk on Haydn and his Works. 6.40—Concert by the Wilhelm Wacek Orchestra. 7.30—Talk: Conversation and Dialogue.
9.0—The Less-known Works of Richard Wagner. Concert by the Volksoper Orchestra, conducted by Anton Konrath, and the Prix Quartet. Soloists: Lili Ulanovsky (Soprano), Karl Ettl (Bass), Hermann Zechner (Pianoforte), Dr. Hans Lewitus (Clarinet), Otto Stix (Double Bass) and Erich Meller (Pianoforte). Explanatory Notes by Dr. Julius Kapp. In the interval at 8.45—News Bulletin.
9.45—Concert by the Isy Geiger Orchestra relayed from the Café Spelndide.

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.
10.30 *a.m.*—Aviation Weather Report. 10.25—10.45—Interval. 10.45—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Light Music on Gramophone Records.
12.10 *p.m.*—Weather Forecast. 12.15—Economic Report. 12.25—12.35—Interval. 12.35—Light Music on Gramophone Records. 12.55—1.45—Interval. 1.45—Light Music on Gramophone Records. 2.15—Aviation Notes. 2.20—Interval.
2.25—Historical Talk: The Union of Lithuania and Poland. 2.45—Exchange Quotations and Hydrographic Report. 2.50—Programme for Children. 3.15—Interval. 3.20—Historical Talk: France in the Seventeenth Century. 3.40—Light Music on Gramophone Records. 4.10—Talk: The Latest Geological Discoveries in South-East Poland.
4.35—Symphony Concert by the Philharmonic Orchestra, conducted by Gregory Fitelberg. Soloist: Joseph Kaminsky (Violin). Classical Symphony (Prokofieff). Violin Concerto in F Minor (Lalo). Serenade (Casella). Ballet Music from "Les Brigands" (Maklakiewicz).
5.50—Miscellaneous Items. 6.25—Agricultural Report. 6.25—Programme Announcements. 6.30—Sports Notes. 6.35—Light Music on Gramophone Records. 6.45—Radio Journal. 7.0—Talk: Romanticism in the Cinema.
7.15—*Concert of Popular Music by the Station Orchestra*, conducted by J. Oziminsky. Soloist: Mme. I. Cywinska-Bojanovska (Soprano). Overture and Czardas from "Der Geist des Wojewoden" (Grossman). Songs: (*a*) Aria from "Mazeppa" (Münchheimer), (*b*) Aria from "Manon" (Massenet). Selection from "Thaïs" (Massenet). Songs: (*a*) Dimanche and Dépêche-toi d'aimer, fillette (Moniuszko), (*b*) Le Soleil (Nieviadomsky), (*c*) Rêverie (Kratzer), (*d*) Song (Gorsky). Erlkönig (Schubert). Träumerei (Schumann). Waltz, Wienerblut (Joh. Strauss). Mazurka (Namyslovsky). 8.45—Answers to Correspondents and Technical Notes.
9.0—Pianoforte Recital, by Edward Steinberger. Sonata in F Minor, Op. 2, No. 1 (Beethoven). Andante con variazioni in F Minor (Haydn). Gavotte (Glück-Brahms). Caprice on Ballet Airs from "Alcestis" (Glück—Saint-Saëns).
9.40—Radio Journal. 9.45—Weather and Police Notes. 9.50—Dance Music.

WEDNESDAY (March 30)

PRINCIPAL EVENTS

SYMPHONY CONCERTS

7.30 p.m. Langenberg: Haydn programme.
9.35 „ Daventry: Haydn programme.

CONCERTS (Vocal and Instrumental)

12.30 p.m. Radio-Paris: "Spain in Music"
3.30 „ Hamburg: Relay from Bad Nenndorf.
7.0 „ Stockholm: "The Creation" (Haydn), relayed from the Cathedral, Göteborg.
7.10 „ Budapest: Operatic programme.
7.55 „ Hilversum: Choral and Orchestral Music.
8.0 „ Brussels No. 1: The Weynandt Male Voice Quartet.
8.0 „ Schweizerischer Landessender: Contemporary Swiss Composers—Werner Wehrli.

OPERAS AND OPERETTAS

7.45 p.m. (app.) Rome: Relay from the Teatro Reale.
7.55 „ „ Heilsberg: "Falstaff" (Verdi), 3rd, 4th, 5th and 6th Scenes, relayed from the Königsberg Opera.
8.30 „ Strasbourg: "Tales of Hoffmann"
8.35 „ Frankfurt: "Der tapfere Kassian" (Oskar Straus).

CHAMBER MUSIC

11.55 a.m. Huizen.
7.0 p.m. Heilsberg, Königs Wusterhausen: String Quartets (Haydn).
9.0 „ Warsaw: Pianoforte Quintet (Brahms).

RECITAL

9.10 p.m. Huizen: Songs and Pianoforte.

PLAYS

7.0 p.m. Breslau, Berlin: "Jeder ist seines Glückes Schmied."
8.5 „ Munich: "Der Bauer geht um."
8.45 „ Brussels No. 1: "Les Romanesques" (Rostand).

DANCE MUSIC

9.40 p.m. Berlin, Breslau: Paul Godwin's and Alemany Bajo's Bands.

Tales of Hoffmann

Offenbach's success as a composer of comic operas of that slight order for which we have no exact equivalent in this country was almost unique. He was at work on the *Tales of Hoffmann* when he died. It was completed by Guiraud and produced in Paris in 1881, the year after its composer's death, and was given over a hundred times in that same year. It has ever since been in the repertory in Paris and is regularly played in most countries of Europe. Hoffmann is a poet, and in a Prologue we see him drinking with friends in a wine-cellar in Nürnberg. They egg him on to boast of his love affairs, and each of the three following Acts is his recital of one of them, set forth dramatically as it had happened. Through all his adventures there is at his elbow an evil magician rather like Gounod's Mephistopheles in *Faust*. In each Act he has a different disguise. The heroine of the First Act is a doll, with whom, by the magician's arts, Hoffmann falls in love until the romance is shattered with the breaking of the doll. In the Second Act it is Giullieta with whom he is in love, and on whose behalf he challenges and slays the elderly Schlemil; but the lady after all runs off with another, sailing away to the tune of the Barcarolle. The next romance is with Antonia, who dies in his arms of a wasting disease. An Epilogue brings us back to the wine-cellar, where Hoffmann renounces love and proposes to drown his griefs in the wine cup. The opera is to be broadcast from STRASBOURG this evening.

A characteristic view of Spain, whose music, by its own and by Russian and French composers, is to be broadcast at 12.30 by RADIO-PARIS.

Male Voice Quartets

The four singers who join to present quartets for men's voices from BRUSSELS No. 1 station this evening are M. Weynandt and three of his pupils at the Royal Conservatoire of Brussels; the Quartet has, as yet, made only a few public appearances. It has, however, already won notable successes. The programme which they are to present consists wholly of music specially designed for four male voices, and the recital falls into three parts. In the first, the Quartet are to sing old music, some of it from the sixteenth and seventeenth centuries, and coming down to the time of the Belgian composer Grétry, who is usually counted as a member of the French school. The second part will include Borodin's *Sérénade de quatre galants à une dame*, three songs of France, and two excerpts from *Dans la Montagne* by Jean Cras. He is an officer on the active list of the Navy, and was quite recently in command of the warship *Provence*; most of his music deals with the sea. A pupil of Duparc, he traces his musical descent from César Franck, and, like him, is a musician of real sincerity of purpose. The third part of the recital is devoted to Belgian popular songs.

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 *a.m.*—The Daily Service.
10.30—Time Signal (Greenwich) Shipping Forecast.
10.45—11.0—"Through Foreign Eyes"—IX.
12.0 *noon*—Quentin Maclean at the Organ.
12.45 *p.m.*—Gramophone Records.
1.0—Time Signal (Greenwich).
1.30—2.15—Bradford Midday Concert. A Programme of Madrigals and Part Songs by Members of the Bradford Festival Choral Society.
3.30—The Bournemouth Municipal Orchestra, conductor, Sir Dan Godfrey. Sybil Eaton (Violin). Orchestra: Symphony in E Flat, No. 1 (Haydn). Sybil Eaton and Orchestra: Violin Concerto (Beethoven). Orchestra: Variations on a Theme by Haydn (Brahms).
4.45—Time Signal (Greenwich).
4.45—Reginald New at the Organ.
5.15 (Daventry)—The Children's Hour.
5.15 (London and Northern)—Jock McDermott and his Band.
6.0—"The First News."
6.30—Time Signal (Greenwich).
6.30—The Foundations of Music. Haydn Pianoforte Sonatas.
6.50—7.20—"The Theatre." Mr. James Agate.
7.30—Mr. G. Lowes Dickinson: "Goethe."
8.0—A Recital. Goethe (1749-1832). Settings of his Poems, sung by George Parker (Baritone).
8.30—Jack Payne and his Band.
9.0—Time Signal (Greenwich).
9.0—"The Second News."
9.15—Shipping Forecast: New York Stock Market Report.
9.20—Topical Talk.
9.35—Franz Joseph Haydn (1732-1809). A Concert of some of his lesser-known music given on the Eve of the 200th Anniversary of his Birth. Noel Eadie (Soprano). Ernest Hall (Trumpet). The B.B.C. Orchestra, conducted by Percy Pitt.
11.0—12 *midnight*—Dance Music.
11.30—Time Signal (Greenwich).

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 *a.m.* (London and Northern)—The Daily Service.
10.30—11.0 (London and Northern)—Daventry National Programme.
11.30—12 *noon* (London)—Experimental Television Transmission (Baird Process). (356.3 m. Vision; 261.3 m. Sound).
12.0—The Midland Studio Orchestra. Gladys Perry (Pianoforte).
1.15 *p.m.*—Organ Recital by G. D. Cunningham.
2.0—3.0—The Northern Studio Orchestra. Ruth Araujo (Violin).
3.30 (London and Northern)—Daventry National Programme.
5.15—The Children's Hour.
6.0—"The First News."
6.30 (London)—The B.B.C. Theatre Orchestra. (Leader, S. Kneale Kelley), conductor, Leslie Woodgate. Darroll Richards (Tenor).
6.30 (Midland)—The Midland Studio Orchestra.
6.30 (Northern)—Gramophone Records.
6.50 (Northern)—A Relay from The Palace Theatre, Blackpool.
7.45 (London)—A Pianoforte Recital by Maurice Reeve.
7.45 (Midland)—Frank Newman at the Organ.
8.0 (Northern)—Sir James Sexton. Sea Shanties. A Talk with illustrations.
8.20—"To Any Husband." Adapted by Anne Parlane from the short Story, "A Wildgoose Chase," by A. E. Coppard.
9.0 (London and Midland)—The Wireless Military Band, conductor, B. Walton O'Donnell. Chief Os-Ke-Non-Ton.
9.0 (Northern)—The Studio Orchestra, directed by John Bridge. Bertha Armstrong (Soprano).
10.15—"The Second News."
10.35 (Midland)—Experimental Transmission (Fultograph Process).
10.40—11.0 (Midland)—As London.
10.35—12 *midnight* (London and Northern)—Dance Music.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.
7.30—8.30 *a.m.*—Topical Review. 11.0—Chimes and Weather. 11.15—1.0 *p.m.*—Interval. 1.0—Light Music on Gramophone Records. 1.30—Sextet Concert. 2.0—Theatre Notes, Variety Music on Gramophone Records and Film Notes.
2.20—*Sextet Concert* (contd.). Canzonetta (Filipucci). Selection from "Hérodiade" (Massenet). Träumerei (Schumann). Duet from "Boris Godounoff" (Moussorgsky).
2.50—Radio Labour Exchange Report. 3.0—Programme for Hospitals and Benevolent Institutions, with Gramophone Records. 4.0—7.0—Interval.
7.0—*Concert by the Station Trio.* A travers les longs jours (Elgar). Selection from "Un ballo in Maschera" (Verdi). Aubade for Violin (Caludi). Hungarian Dance, No. 4 (Brahms).
7.30—Exchange Quotations and Catalan Grammar Lesson. 8.0—Request Gramophone Concert. 8.15—Talk arranged by the Mutual Aid Society. 8.30—Request Gramophone Concert (contd.), and News Bulletin. 9.0—Chimes, Weather, Market Prices and Exchange Quotations. 9.5—Humorous Review of the Week's Events in Verse.
9.15—*Concert by the Station Orchestra.* Indian March, Hobokomoko (Reeves). Selection from "Jugar con fuego" (Barbieri). Gavotte en Rondeau (Lully). Spanish Dance, No. 2, Oriental (Granados). Sus ojos bellos (Fernandez). Serenata a Graciella (Desprez).
10.0—"*L'Eterna Questio*" — One Act Play in Catalan (Artis) and "*Nirvols en Creu*"—One-Act Play in Catalan (Surinac Senties). 11.30—Light Music on Gramophone Records. 12 *midnight* (approx.)—Close Down.

BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW.
Transmits at intervals from 8.55 a.m.
11.5 *a.m.*—*Concert by the Station Orchestra.* Overture (Rossini). Tibetan Suite (Dreyer). Vendemmiale (Travaglia). Liebesgespräch (Schmalstich). 11.35—Exchange Quotations and *Concert (continued).* Selection from "His Life for the Czar" (Glinka). Selection from "Les Cloches de Corneville" (Planquette). Hawanisches Ständchen (Zimmer). Gnomen parade (Wetzel). Waltz, A toi (Waldteufel).
12.30 *p.m.*—Cinema Review and News Bulletin. 3.0—Light Music on Gramophone Records. 4.0—Zither Recital. 4.30—Song Recital. 5.55—Time Signal and Programme Announcements. 6.0—German Lesson. 6.30—Concert of Yugoslavian Music by the Station Orchestra. 7.20—Programme of Tangos. 7.50—Introductory Talk to the following Transmission.
8.0—"*La Bohème*"—Opera (Puccini) on Gramophone Records. In the interval—News and Sports Notes.

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.
Transmits at intervals from 5.25 a.m (*Hamburg* Relay).
3.35 *p.m.*—See *Hamburg*. 4.30—Talk by Dr. Murawski.
5.0—Josef Haydn Recital on the Bi-centenary of his Birth, with Commentary. 5.30—Legal Talk from *Berlin* (*Witzleben*), followed by Weather for Farmers. 6.0—Talk on International Affairs. 6.30—Talk for Civil Servants. 6.55—Weather Forecast.
7.0—See *Heilsberg*. 7.35—Topical Talk. 8.0—See *Hamburg*. 9.0—Political Press Review. 9.15—News Bulletin. 9.30—See *Leipzig*. 10.30 (approx.)—Dance Music from *Berlin* (*Witzleben*). 11.30 (approx.)—Close Down.

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert).
6.0—Topical Talk. 6.10—Programme of Popular Music. 6.55—Labour Market Report. 7.0—See *Breslau*. 8.15—News Bulletin.
8.25 — Orchestral Concert from the Works of Karol Rathaus, conducted by the Composer 9.25—Topical Report: Unemployment in the United States. 10.5—News Bulletin, followed by Dance Music by Paul Godwin and his Tango Band, relayed from the Femina. 11.30 (approx.)—Close Down.

BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW.
12.45 *p.m.*—Septet Concert. News in the interval. 1.50—Exchange Quotations. 2.0—Popular Music on Gramophone Records. 3.0—Concert for the Blind relayed from *Paris* (*Ecole Superieure*), 671 kc/s (447.1 m.). 7.30—News and Market Prices. 7.40—Light Music on Gramophone Records. 7.55—Lottery Results. 8.0—Agricultural Talk. 8.15—News and Weather Forecast.
8.30—*Tchaikovsky Concert.* Conductor: A. Guitraud. Soloists: Mlle. Rolla Fabris and M. Coulomb. Selections from "The Queen of Spades." Second Suite of Children's Songs. Songs by Mlle. Rolla Fabris and M. Coulomb. Selections from "The Seasons" (Tchaikovsky-Salabert). Selection from "Eugen Onegin" (Tchaikovsky-Godfrey). Songs. Selections from the Nutcracker Ballet. After the programme—Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).
Transmits at intervals from 5.30 a.m.
4.50 *p.m* (from *Gleiwitz*)—*Pianoforte Recital by Eva Ebner-Robert.* Papillons (Schumann). Waltz in A Flat Major (Brahms). Air de Ballet (Moszkovsky). Tango (Albéniz-Godovsky). 5.20 (from *Gleiwitz*) — Talk: The Brain-Worker and Sport. 5.45 (from *Gleiwitz*)—Weather for Farmers.
5.55 (approx.) (from Gleiwitz)—Concert by the Orchestra of the Upper Silesian Landestheater, conducted by Albin Eschrich. Festival Overture (Lassen). Harp Aria from "Esther" (Händel-Huber). Introduction to the Third Act, Dance of the Apprentices and Festival Melody from "The Mastersingers" (Wagner). Tone Poem, Finlandia (Sibelius). Waltz, Frauenliebe-und-Leben (Blon).
6.45 (from *Gleiwitz*)—Weather for Farmers. 6.50 (approx.)—Topical Review.
7.0—Man is Architect of his own

Fortune—Radio Play (Otto Zoff) with Music by Harry Ralton. 8.15—News Bulletin.
8.25—*Orchestral Concert* conducted by Franz Marszalek. Overture, Nachlänge von Ossian (Gade). Ballet Suite, La Source (Delibes). Divertissement from "Das Schwergewicht" (Krenek). Cradle Song Reverie (Sgambati). Potpourri of Popular Songs (Golwyn), followed by—Time and News.
10.20—Dance Music from *Berlin (Witzleben)*. 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.
12.15—1.45 *p.m.*—Weather and *Gramophone Concert*. L'Echo des Fanfares (Courtade). Union March (Courtade). Carillon Paraphrase (Tournemire). Selections from "Mignon" (Thomas). L'Emir d'amour (Knosp). Song (Schumann). Rêve d'enfant (Ysaye). Gipsy Airs (Espajo). Overture, Sigurd (Reyer). Neapolitan Serenade (Drigo). Thé dansant (Fletcher). Waltz, Sincerity. The Wedding of the Winds (Hall). Potpourri, Holiday Hits. Ballet Music from "Sylvia" (Delibes). Song from "Don Juan" (Napravnik). Overture, "Suzanne's Secret" (Wolf-Ferrari).
5.0—*Belgian Sonata Recital*, by Henry Wagemans (Violin) and Charles Scharres (Pianoforte). Sonata (De Jong).
5.30—*Gramophone Concert*. March, Stars and Stripes (Sousa). March, Fairest of the Fair (Sousa). Rhapsody in Blue (Gershwin). Nell Gwyn Dance No. 3 (German). Minuet (Boccherini). Mascarade (Lacombe). Coeur brisé (Gillet). Minuet (Paderevsky). Overture, "Mireille" (Gounod). 6.15—Talk on Astronomy.
6.30—*Gramophone Concert*. Overture, "Euryanthe" (Weber). Selection from "Les Huguenots" (Meyerbeer). Selection from "La Juive" (Halévy). Eine kleine Nachtmusik (Mozart). Berceuse, La Route d'Emeraude (De Boeck). Overture, "The Daughter of the Regiment" (Donizetti). 7.15—Talk: Tobacco Growing. 7.30—Medical Talk.
8.0—**Concert by the Weynandt Vocal Quartet.** Ave Maria (Arcadelt). Psaume des Camisards (Goudimel). 15th Century Pavane, Belle qui tiens ma vie (arr. Weynandt). Déliette, mignonette (Du Caurray). Selection from Les deux Avares (Grétry). Selections from Dans la Montagne (Cras). Sérénade de quatre galants à une dame (Borodin). Basque Song, Belle Lune (arr. Weynandt). Vieux Noël du Languedoc (arr. Radoux). Le moine capucin—Landes Popular Song (arr. Weynandt). Songs (arr. Weynandt): (*a*) Het Kwezelken, (*b*) Cloqu's sonnez! (*c*) Chanson de conscrits, (*d*) Noël nouvelet, (*e*) Soldat qui reviens de la guerre. 8.45—"*Les Romanesques*" Comedy in Three Acts (Rostand). In the intervals, Mandoline Solos by Mr. Ranieri. 10.0—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.
12.15—1.45 *p.m.*—Weather Forecast, followed by **"Madame Butterfly" Opera (Puccini), on Gramophone Records in Italian.** 5.10—Concert by the Hotel Atlanta Orchestra. 6.15—Economic Report.
6.30—Concert on Gramophone Records. Second Symphony in E Minor (Rachmaninoff). 7.15—Reading. 7.30—Talk: Internationale Events. 8.—Recitation of "Barrabas," with Pianoforte Accompaniment (Music by Karel Candael). 9.0—Orchestral Concert Relay. 10.0—Le Journal Parlé.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.
11.0 *a.m.*—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 *noon*—Popular Music on Gramophone Records. 4.0—Concert of Variety Music by the Station Orchestra. 5.0—News and Time Signal. 5.10—Concert by the Station Orchestra (contd.). 6.0—Talks on Social Problems and Foreign Politics.
6.40—*Song Recital by Mia Petela*. Mondnacht (Schumann). Ich kann's nicht fassen, nicht glauben (Schumann). Jemand (Schumann). Ich trage meine Minne (R. Strauss). Song from "La Tosca" (Puccini). Waltz, Frühlingsstimmen (Johann Strauss).
7.0—*Violin Recital by Mme. Bartfeld*. Piece (Goldmark). Sicilienne et Rigaudon (Francoeur-Kreisler). Slavonic Dance No. 2 (Weinberger). Polonaise brillante in D Major (Wieniawsky). 7.30—Talk.
7.45—*Pianoforte Recital*. Two Pieces (Scarlatti). Sonata, Op. 31, No. 2 (Beethoven). Selections (Chopin): (*a*) First Impromptu in A Flat Major, (*b*) Fifth Polonaise in F Sharp Minor.
8.15—*'Cello Recital*. Chanson triste (Tchaikowsky). Träumerei (Schumann). Chant du Ménestrel (Glazounoff). Minuet (Valensin). Serenade (Drdla). 8.45—News Bulletin.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW. Programme also relayed on 210 m. from 5.30—11.0 p.m.
8.15 *a.m.*—Concert by the Station Quintet. 10.10—Tidal Report. 11.0—Chimes. 11.5—Sponsored Concert on Gramophone Records. 2.30 *p.m.*—Morse Lesson. 3.0—Scouts' Programme.
4.0—*Orchestral Concert*, conducted by Stefan Bertha. Adagio (Kodály). Song from "Maya" (Fényes Szabolcs). Tango from "A Midnight Tango" (Komjati). Andalusian Serenade (Szirmai). Neapolitan Serenade (Polgár). Song from "Gipsy Love" (Lehár). Mazurka (Lavotta). Suite Kinderlied (Blech). Two Hungarian Songs (Eröss).
5.0—Italian Lesson.
5.30—*Soloist Concert*. Bianca Keömley (Vocalist), Marta Farkas (Violin), Josef Szterényi (Vocalist) and T. Polgár (Pianoforte). Sapphic Ode (Brahms). Vergebliches Ständchen (Brahms). Songs: Amarilli (Caccini). Songs (Scarlatti). Air (Kern). Violin Solos: Hebrew Melody (Achron). Rondo (Schubert-Friedberg). Our Father (Hubay). Lebender Grabstein (Tarna). Songs: Der Neugierige (Schubert). Wie bist Du meine Königin (Brahms). Violin Solos: Notturno (Chopin-Wilhelmi). Prelude and Allegro (Paganini-Kreisler). May Blossoms (Hubay). Songs: Song (Lányi). Soldiers' Song (Kern-Molnár). Songs (Szendy). Hungarian Songs.
6.45—Talk by Eugen Sipöcz.
7.10—Concert by the State Theatre Ensemble. Selections from "Aida" (Verdi). Quartet from "Rigoletto" (Verdi). Waltz from "Eva" (Lehár). Selection from "The Barber of Seville" (Rossini). Selection from "La Bohême" (Puccini). Finale from Act One of "Lilac Time" (Schubert-Berté). Miserere from "Il Trovatore" (Verdi). Selections from "Der lachende Ehemann" (Eysler). Selections from "I Pagliacci" (Leoncavallo). Aria and Duet from "Aida" (Verdi). Selection from "Les Cloches de Corneville" (Planquette). Selection from "Don Giovanni" (Mozart). Hungarian National Song.
9.0—News and Announcements.
9.20—*Pianoforte Recital by Imre Stefaniai*. Variations on a Theme by Bach (Liszt). Adagio Lugubre (Stefaniai). Selections (Godovsky). Sicilienné (Bach). Cappriccio (Dandrien). Wiegenlied (Schubert). Moment Musical (Schubert). Waltz in D Flat Major (Chopin). Le Cygne (Saint-Saëns). Polonaise in F Sharp Minor (Chopin). Triana (Albeniz). 10.15—Concert by the Bela Rácz Cigány Band from the Hotel Pannonia.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.
See *Langenberg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).
6.30 *a.m.*—Gymnastics. 7.30—Service from the Cathedral. 10.0—Weather Forecast. 10.10—Angling Notes. 11.0—Town Hall Chimes. 11.2—String Ensemble Concert from the Palace Hotel. 12.15—1.45 *p.m.*—Talk for Schools, with Musical illustrations: Don Juan II.
2.0—*Concert by Carl Rydahl's Instrumental Ensemble*. March, La père La Victoire (Ganne). Overture, "Maritana" (Wallace). Waltz, Wienerblut (Johann Strauss). Selection from "La Traviata" (Verdi). Frühlingsglaube (Schubert). Dance from the Music to "Wayland the Smith" (Fini Henriques). Talk for Women. Amelie-Vals (Lumbye). Selection from "Lilac Time" (Schubert-Berté). Ballgeflüster (Meyer-Helmund). La Lettre de Manon (Gillet). Ballet Scene (Carl Rydahl). Entry March of the Gladiators (Fucik).
4.0—Gramophone Records of Variety Music. 4.40—Exchange Quotations and Fish Market Prices. 4.50—Talk:

WEDNESDAY
continued

Pioneers of the Danish Church in America. 5.20—French Lesson. 5.50—Weather Forecast. 6.0—News Bulletin and Report of the Non-Political Radio Club. 6.15—Time Signal. 6.30—Agricultural Talk. 7.0—Town Hall Chimes.
7.2—*Concert of Dances from Classical Operettas by the Radio Orchestra*, conducted by Emil Reesen. March from "Der arme Jonathan" (Millöcker). Mädel schau—Waltz from "Cousin Bobby" (Millöcker). Chin-Chin Chinaman, Polka from "The Geisha" (Jones). Quadrille from "Princess Ninetta" (Johann Strauss). The Kiss Waltz from "Der Lustige Krieg" (Johann Strauss). Polka from "Le Prince de Conti" (Johann Strauss). Polka Mazurka from "The Vice-Admiral" (Millöcker). Dance from "Les Brigands" (Offenbach). Mimosa Waltz from "The Geisha" (Jones). Entry March from "The Gipsy Baron" (Johann Strauss).
8.0—"*He thought of Everything*"—a Comedy in One Act (E. N. Taylor) translated by E. and J. Thorning.
8.20—*Concert of Danish Vocal Quartets*. Three Selections (Ludolf Nielsen): (*a*) Gamle Rim, (*b*) Kukkervise, (*c*) Gamle Maren Skimmel. Two Selections (Paul Hellmuth): (*a*) Mit Hjem, (*b*) Maj-Vise. Ved Rugskellet (Walter Zacharias). Nabuchodonoser (Aage Larsen).
8.40—Reading (Kjerulf). 9.0—News Bulletin.
9.15—Concert of Russian Music by the Radio Orchestra, conducted by Emil Reesen. Overture, "His Life for the Czar" (Glinka). Suite from the Nutcracker Ballet (Tchaikovsky). Selection from the Ballet Music to "Prince Igor" (Borodin).
9.50—Dance Music relayed from the Wivex Restaurant. 11.0 (in an interval)—Town Hall Chimes. 11.30 (approx.)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).
1.30 *p.m.*—Time Signal, Weather Report, Stock Report, and Light Music on Gramophone Records. 2.0—6.0—Interval. 6.0—Popular Music on Gramophone. 6.15—Programme for Children. 7.0—Light Music on Gramophone Records. 7.20—News Bulletin. 7.30—Time Signal. 7.31—Gaedhilg. 7.45—German Lesson.
8.0—Concert of Military Music, conducted by Colonel Fritz Brase. 9.0—Songs by Robert Irwin (Baritone). 9.15—Songs by Kathleen Grennon (Soprano). 9.30—Dance Music, relayed from the Gresham Hotel. 10.30—Time Signal, News, Weather Report and Close Down.

FÉCAMP (France)

Radio-Normandie. 1364 kc/s (219.9m.); 1kW
Transmits at intervals 12 noon.
7.30—Dance Music from the Municipal Casino. 8.15—News Bulletin. 8.30—Instrumental Concert with with Recitations.
12 *midnight*—*Concert of Dance Music*. 1.0 *a.m.* (*Thursday*)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.).
Transmits at intervals from 5.15 a.m.
11.5 *a.m.*—Gramophone Concert of Popular Music. 11.40—News, Weather and Programme Announcements. 11.55—Nauen Time Signal. 12.5 *p.m.*—Concert from *Langenberg*. 12.50—News Bulletin. 1.0—Sponsored Gramophone Concert. 1.30—Sponsored Programme for Children. 1.45—Weather Report. 2.5—Time and Economic Notes.
2.15—Programme for Children. 3.55—Economic Notes. 4.0—See *Stuttgart*. 5.30—Economic Notes. 5.40—Talk by Dr. Gundersheimer. 6.5—See *Stuttgart*. 6.30—Time and News. 6.35—Orchestral Concert. 7.5—Italian Programme. 8.35—"*Der tapfere Kassian*"—Musical Play in One Act after Schnitzler (Oscar Straus). 9.25—See *Berlin (Witzleben)*. 9.55—Time Signal, Weather Report, News and Sports Notes.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.), and *Kiel*, 1,292 kc/s (232.2 m.).
Transmits at intervals from 5.30 a.m. (Weather and Concert from *Hanover*).
10.0 *a.m.* (from *Kiel*)—*Quintet Concert* conducted by Hans Döring. Overture, "Indra" (Flotow). Selection from "Faust" (Gounod). Souvenir (Drdla). Potpourri, Wie einst im Mai (Kollo). Suite, Ein Fest im Gnomenreich (Witteborn). Erinnerungs-Walzer (Waldteufel). 11.10—Time, Weather and Winter Sports Notes. 11.20—Exchange Quotations. 11.30 (from *Kiel*)—*Concert* (*continued*). Bulgarian War March (Sebek). Legend (Massenet). Suite, Im Zeichen des Rokoko (Ailbout). Puck auf Brautschau (Derksen). Waltz, Krolls Ballklänge (Lumbye).
12.15 *p.m.*—Sponsored Programme. 1.0—Ice Report and News. 2.0—Weather Report. 2.5—Exchange Quotations. 2.35—Shipping Report. 3.0 (from *Kiel*)—Talk: Schleswig-Holstein Customs, with Musical Illustrations.
3.30 (from Hanover)—Concert conducted by Ernst August Bürger, relayed from *Bad Nenndorf*. Overture, "Raymond" (Thomas). Selection from "Prince Methusaleh" (Johann Strauss). Andante in E Major for 'Cello and Orchestra (Goltermann). Selection from "Victoria and her Hussar" (Abraham). Wedding March from "A Midsummer Night's Dream" (Mendelssohn).
4.30—Talk: A Visit to the German Colony in Hollywood. 4.50—Variety Programme. 5.30 (from *Kiel*)—Talk: Modern Marriage Ideals and the Education of Boys. 5.55—Talk: The South of Lower Saxony in North German Literature. 6.20—Exchange Quotations and Market Prices. 6.25—Weather Forecast.
6.30—*Pianoforte Recital by Edmund Schmid*. Gavotte (Gluck-Brahms). Sarabande and Elegy from the Eichendorff Suite, Op 62 (Walter Niemann). Pianoforte Piece in D Minor, Op. 8, No. 1 (Walther Lampe).
7.0—"Die grosse Freiheit"—Play (Walter Anatole Persich). 8.0—"From a Dance Programme of 1910"—Concert by the Scarpa Orchestra. In the intervals, at 9.15—News Bulletin, at 9.30—Topical Talk, and at 10.20—Ice Report.

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).
Transmits at intervals from 5.30 a.m. (Gymnastics and Gramophone Concert).
11.0 *a.m.* (from *Danzig*)—*Concert by the Tschertok Band*. Overture, "Mamsell Unnütz" (Leuschner). Romance, Scène d'amour (Köpping). Eisblumen—Potpourri of Russian Gipsy Songs (Leuschner). Elégie (Massenet). Aufzug der Wichtelmännchen (Plessov). Eljen-Czardas (Stepani). Selection from "Das Veilchen vom Montmartre" (Kálmán). Tango Serenade, Zigeunersehnsucht (Plessov). Dir sing ich mein Lied (Lehár). Potpourri, Hoch das Bein (Leuschner).
1.0 *p.m.*—Gramophone Concert of Variety Music. 2.35—Talk for the Housewife. 2.45—Talk for Parents.
3.10—*Leuschner Concert by the Orag Orchestra*, conducted by Eugen Wilcken. Overture, Hokus Pokus. Serenade, Aus vergelbten Blättern. Waltz, Berliner Konzertbummel. Friedemann-Bach Suite. Russian Song Potpourri, Eisblumen. Humorous Overture, Fahrend Volk.
4.15—Programme for Children: "*The Treasure of the Silver Lake*"—a Tale (Karl May), arranged for Radio by Günther Bibo, on the Twentieth Anniversary of the Death of Karl May. 5.15—Ice Report and Market Prices. 5.30—Talk on Numismatics. 6.0—Talk for Business Men. 6.30—Dialogue: The Birth of the Gramophone Needle. 6.55—Weather Forecast.
7.9—Concert of Chamber Music. Reiter Quartet (Josef Haydn). Serenade from the Quartet in F Major (Haydn).
7.35—Talk on the following Transmission, with Gramophone illustrations.
7.55—"Falstaff"—Scenes 3, 4, 5 and 6 of the Opera (Verdi.) relayed from the **Opera House, Königsberg.** 8.40 (in an interval)—Announcements. Weather and News after the programme. 10.0 (approx.) (from *Danzig*)—Concert and Dance Music. 11.0 (approx.)—Close Down.

HILVERSUM (Holland)

160 kc/s (1,875 m.); 8.5 kW. (transmitted from *Huizen*).
6.25—9.40 *a.m.*—Programme of the Workers' Radio Society (V.A.R.A.). 6.25—6.40 and 7.10—7.25—Gymnastics. 7.40—Gramophone Records of Light Music. 8.40—Quintet Concert, conducted by Loe Cohen 9.40—Programme of the Libera Protestant Radio Society (V.P.R.O.). Religious Transmission. 9.55 till Close Down—V.A.R.A. Programme. 9.55—*Programme for Workers*. Recitations, Quintet Selections, Dramatic Items and Gramophone Records of Variety Music.
11.40—*Septet Concert*. March (Marbot). Waltz, Lebensmärchen (Fucik). Serenata bolero (Orlando). Gramophone Records of Light Music. Selection from "Die Puppenfree" (Bayer). Tango, Du bist mein Traum (Korngold). Gramophone Records of Variety Music. Selection from "White Horse Inn" (Benatzky). Love Serenade (Becce). Gramophone Records of Popular Music. Waltz, A toi (Waldteufel). Rondo a cappriccioso (Beethoven). Gramophone Records of Light Music. Pianoforte Solo by Karl Franck: The Knave of Diamonds (Steele). Saxophone Solo: Hot Sax (Phillips). Foxtrot, Rhymes (Sarony). Pasodoblé, Marietta (Kapplusch).
1.25—1.55 *p.m.*—Interval. 1.55—Culinary Talk.
2.40—*Flute and Pianoforte Recital from the Works of Haydn* by Joh. Feltkamp and Piet Tiggers. Sonata in E Flat for Pianoforte. Sonata No. 8 in G for Flute and Pianoforte.
3.10—Programme for Children.
5.10—*Orchestral Concert*, conducted by Hugo de Groot. Overture, "Das Modell" (Suppé). Waltz Potpourri (Ciere). Baby Parade (Mannfred). Fantasia, Mosaic sur Rossini (Tavan). Gramophone Records of Light Music. March, Per aspera ad astra (Urbach). Entr'acte Gavotte (Gillet). Schneeglöckchen läuten den Frühling ein (Eilenberg). Mazurka, Frauenherz (Jos. Strauss). Potpourri, Wiener Operetten Revue (Robrecht). 6.25—Talk. 6.45—*Concert* (*contd.*). Selections (Sousa): (*a*) The Liberty Bell, (*b*) Washington Post, (*c*) Semper Fidelis, (*d*) Hands across the Sea, (*e*) El Capitan, (*f*) The Gladiator, (*g*) Hail to the Spirit of Liberty, (*i*) Stars and Stripes.
7.10—"His Mission"—Play (Grekoff).
7.55—Choral and Orchestral Concert with Soloists. In the interval—Topical Dialogue. 10.40—News. 10.55—Gramophone Records of Variety Music. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

1,004 kc/s (298.8 m.); 8.5 kW. (transmitted from *Hilversum*).
Programme of the Christian Radio Society (N.C.R.V.).
7.40 *a.m.*—Bible Reading. 7.55—Gramophone Records of Light Music. 9.10—9.40—Interval. 9.40—Choral Selections. 10.10—Programme for Invalids. 10.40—Recital by M. Jurjaanz (Harmonium) and Mlle Geest (Soprano). 11.40—Police Notes.
11.55—Instrumental Concert. Soloists: Mlle. Brand (Soprano), H. Hermann (Violin), P. Oskam (Violin), F. Hermann ('Cello) and Mlle Lauenroth (Pianoforte and Harmonium). Sonata in E Minor for Two Violins, 'Cello and Pianoforte (Corelli). Sonata in G Major for Violin, 'Cello and Pianoforte (Mozart). Five Sacred Songs. Andante for 'Cello and Pianoforte (Mann). Trio for Two Violins and 'Cello (Mozart). Petite Ballade (Rieding). Gebet (Weber). Aria from "St. Paul" (Mendelssohn). Selections (Franz): (*a*) Bei der Wiege, (*b*) Bitte, (*c*) Im Herbst. Duets in A Major (Franchesini). Spanish Dance in E Minor (Granados). Songs. Spanish Suite Op. 105 (Albeniz). 1.40—2.10—(Interval). 2.10—Reading. 2.40—Talk.
3.10—*Concert*. March, Frisch voran (Blankenburg). Autumn Dream (Joyce). Selection from "Martha" (Flotow). March, Fortuna (Siede). Ein Melodientraum (Urbach). March. Veilchen am Wege (Fetras). Wedding Procession in Liliput (Translateur). Selection from "Rigoletto" (Verdi). Leuchtkäferchens Stelldichein (Siede). Njord Lied (Neeb). March of the K.L.M. 4.40—Programme for Children. 5.40—Talk for Peasants. 6.40—Talk. 7.10—Police Notes.
7.25—Religious Information. 7.40—Talk and Announcements.
7.55—*Gramophone Concert*. Egyptian March (Strauss). Frühlingserwachen (Bach). Turkish Patrol (Michaelis). Patrouille from Suite orientale (Popy). Elfengeflüster (Rhode). Puppenspiele (Lederer.)

WEDNESDAY continued

Baby Parade (Mannfred). Selection (Evans). Die frechen Spatzen (Löhr). Potpourri, Aus Offenbach's Musterkoffer (Urbach). 8.30—Talk.

9.10—Song and Pianoforte Recital by T. Sluys (Soprano) and Barend Renden (Pianoforte). Songs (Haydn): (*a*) Ermunterung, (*b*) Das Leben ist ein Traum. Rondo Op. 51 No. 1 for Pianoforte (Beethoven). Songs (Schubert): (*a*) Auf dem See, (*b*) Der Wachtelschlag, (*c*) Abendröthe. Pianoforte Solo: Sunday Evening (Grovlez). Songs (Hahn): (*a*) Tous deux, (*b*) En Sourdine. Ballade Op. 6 (Röntgen). Songs (Wolf): (*a*) Der süsse Schlaf, (*b*) Es ist ein Schnitter, (*c*) Ein solcher ist mein Freund. 10.10—News Bulletin. 10.20—Gramophone Records of Variety Music. 11.10 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See *Copenhagen*.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
Transmits at intervals from 5.45 a.m. (Exercises, Weather, Time and Gramophone Concert.)

10.20 *a.m.*—*Gramophone Concert*. Waltz, Estudiantina (Waldteufel) by the Berlin State Orchestra conducted by Alois Melichar. Song: Murmelndes Lüftchen (Jensen) by Franz Völker (Tenor). Gnomenreigen (Liszt) by Alexander Brailovsky (Pianoforte). Kamarinskaja—Fantasia on Two Russian Folk Songs (Glinka), by the Berlin State Orchestra conducted by Alois Melichar. Song: In der Waldschenke (Simon) by Eduard Kandl (Bass). Entr'acte Gavotte from "Mignon" (Thomas) by Paul Godwin and his Orchestra. Waltz, The Kiss (Arditi) by Adele Kern (Soprano). Selections from "The Gipsy Baron" (Johann Strauss) by the Berlin State Orchestra conducted by Alois Melichar.

11.0—Concert from *Breslau*. 11.50—Weather, Announcements and Time Signal.

12 *noon*—*Concert conducted by Wolf*. March, An die Gewehre (Lehnhardt). Overture, "Der Erlenhügel" (Kuhlau). Waltz from "Naïla" (Delibes). Fantasia on the Works of Mozart (Urbach). Elegy (Suk). Das Kirschblütenfest (Niemann). Selection from "Faust" (Gounod). Serenade (Heykens). Waltz Intermezzo, Loin du Bal (Gillet). Czardas, Mon bien-aimée (Gabriel-Marie).

1.30 *p.m.*—Sponsored Programme on Gramophone Records. 2.30—Economic Notes and Time Signal. 2.50—Programme for Children—Concert by a Children's Band. 3.20—Talk The Stars in April. 3.40—Talk: House Plants.

4.0—*Concert of Favourite Overtures* conducted by Wolf. "The Merry Wives of Windsor" (Nicolai). "Martha" (Flotow). "Heimkehr aus der Fremde" (Mendelssohn). "The Thieving Magpie" (Rossini). "Morning, Noon and Night" (Suppé). "The Gipsy Baron" (Strauss). "Orpheus in the Underworld" (Offenbach).

5.0—Talk arranged by the Post Office. 5.15—Talk: What everybody should know—Horse-drawn Traffic. 5.40—Review of New German Books. 6.0—Weather, Time, Economic and Sports Notes. 6.15—Talk on Health: First Aid. 6.30—Talk: Rates and Taxes. 6.55—News Bulletin. 7.0—Illustrated Talk: From the Flute to the Kettledrum.

7.30 — **Symphony Concert by the Station Orchestra** conducted by Buschkötter. Soloist: Helene Garbusova ('Cello). Haydn Programme on the Bi-Centenary of his Birth. Symphony (Haydn, arr. by Buschkötter). 'Cello Concerto in D Major (Haydn). Symphony in E Flat Major. No. 99. After the Concert: News, and Concert and Dance Music. 11.0 (approx.)—Close Down.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.).
Transmits at intervals from 5.30 a.m. (*Witzleben* Relay).

3.35 *p.m.*—Programme for Children. 4.50—Economic Notes, Weather and Time. 5.10—Educational Talk. 5.35—Italian Lesson. 5.55—Programme to be announced. 6.5—Talk on Protective Duties.

6.30—*Concert by the Leipzig Symphony Orchestra conducted by Hilmar Weber*. Overture, "The Barber of Bagdad" (Cornelius). Selections from "Cavalleria rusticana" (Mascagni). Scherzo, Ein eleusisches Fest (Ambrosius). Selection from "Nussknacker und Mausekönig" (Schaub). Symphonic Dance Suite for Jazz Band and Orchestra (Künneke). 8.0—Topical Talk.

8.10 *p.m.*—Two Plays: (*a*) "Das Liebespaar" (Weyrauch), (*b*) "Die von Nebenan" (Rittner). 9.10—News Bulletin.

9.20 (approx.)—**A Mozart Symphony Concert by the Dresden Philharmonic Orchestra conducted by Dr. Hermann Scherchen.** Symphony in D Major. Romance and Theme with Variations from the Tenth Serenade in B Flat Major. Symphony in C Major. 10.30 (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.

11.15 *a.m.*—Light Music on Gramophone Records. 11.45—News Bulletin. 12 *noon*—Time and News.

4.30 *p.m.*—Orchestral Concert. 5.30—Market Prices. 6.0—Russian Lesson. 6.30—Literary Talk. 7.0—Music Lesson. 7.30—Song Recital. 8.0—Concert by the Station Orchestra. 9.0—Time and News Bulletin.

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.

10.45 *a.m.*—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—Light Music on Gramophone Records.

12.10 *p.m.*—See *Warsaw*. 2.0—Talk for Children. 2.15—Talk for Boy-Scouts. 2.25—See *Warsaw*. 3.20—Light Music on Gramophone Records and Topical Talk. 3.55—See *Warsaw*. 5.50—Miscellaneous Items. 6.15—See *Warsaw*. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW.

8.0 *a.m.*—Relay from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 10.0—Orchestral Concert.

1.10 *p.m.*—Instrumental Concert. 3.0—Concert for the Blind. 4.30—Popular Music on Gramophone Records. 7.0—Concert by the Station Orchestra. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Orchestral Concert.

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.

8.0—9.30 *a.m.*—Topical Review. 11.45—Astronomical Report and Culinary Talk. 12 *noon*—Chimes, Announcements, Labour Market Report and Programme Announcements. 12.15 *p.m.*—Time Signal and Interval.

2.0—Chimes, Time Signal, Weather Forecast, Theatre Guide and *Concert by the Station Sextet*. Overture, "Joan of Arc" (Verdi). El Molinero de Subiza (Oudrid). Selection from "I Pagliacci" (Leoncavallo). Song from "Thaïs" (Massenet). Fantasia Morisca (Chapi).

3.20—News and Radio Journal. 3.30—Interval. 7.0—Chimes, Exchange Quotations, Market Prices and Talk, followed by Request Concert on Gramophone Records. 8.15—Announcements, Radio Journal, and Parliamentary Report. 8.30—Interval. 9.30—Chimes, Time Signal and Radio Journal, followed by "*Clavigo*"—Drama in Three Acts (Goethe) arranged for Wireless. 11.45—News and Radio Journal. 12 *midnight*—Chimes and Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*.

MUNICH (Germany)

563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.), and *Nürnberg*, 1,256 kc/s (239 m.).
Transmits at intervals from 5.45 a.m.

6.35 *p.m.* (from *Nürnberg*)—*Choral Concert, conducted by Carl Weidinger*. Auf dem Meere (Heinemann). Abendfeier (Attenhofer). Braun Maidelein (arr. Kirchl). An einem Bächlein (Nagel). Das Ringlein (Nagel). Die Königskinder (arr. Siegert). Uber allen Gipfeln ist Ruh' (Kuhlau). Reiters Morgengesang (arr. Wohlgemut). 7.0—Concert from *Leipzig*. 8.5—"*Der Bauer geht um*"—Play (Ortner). 9.20—Time and News followed by Dance Music from *Berlin* (*Witzleben*). 11.0 (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.); *Porsgrund*, 662 kc/s (452.2 m.), and *Rjukan*, 671 kc/s (447.1 m.).
Transmits at intervals from 10.10 a.m.

4.0 *p.m.*—*Concert by the "Cecil" Orchestra*, conducted by Hans Backe. Overture, "Undine" (Lortzing). Waltz, Lotus Flowers (Emil Olsen). Caucasian Suite (Ippolitoff-Ivanoff). Für Elise (Beethoven). Minuet (Grieg). At the Court of Binnao (Landerein). Dance of the Elves (Henriques).

5.0—Talk (to be announced). 5.30—Programme for Girls. 5.45—Talk on Hygiene. 6.0—Announcements, Weather and News Bulletin.

6.30—**Concert by the Station Orchestra**, conducted by Hugo Kramm. Soloists: Henri Marteau (Violin) and Hugo Kramm (Viola). Concerto for String Orchestra and Pianoforte (Corelli). Concerto in E Major for Violin and Orchestra (Bach). Symphony concertante for Violin, Viola and Orchestra (Mozart).

8.20—Talk for Young People. 8.40—Weather and News Bulletin. 9.0—Topical Talk. 9.15—Stein Balstad reads from his own Works. 9.45—Dance Music on Gramophone Records. 11.0 (approx.)—Close Down.

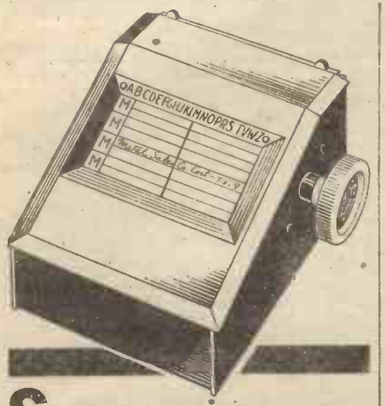
PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW.
Transmits at intervals from 11.45 a.m.

4.30 *p.m.*—Programme of Light and Dance Music from the Olympia Tea Rooms. 5.30—7.0—Interval.

7.0 — Announcements, Agricultural Report and Giornale Radio. 7.20—Light Music on Gramophone Records.

7.45—Time Signal and Announcements, followed by *Concert*. Fête vénitienne (Borel-Clerc). Waltz (Ganne). Fantasia Villereccia



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PARIS (France)

Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW.
Time Signals (on 2,650 m.) at 9.26 a.m. and 10.26 p.m. (Preliminary and 6-dot signals).
5.45 *p.m.*—Le Journal Parlé. 7.20—Weather Forecast. 7.30—Programme for Young People.
8.0—*Symphony Concert.*, conducted by Edouard Flament. Sélection from "The Caliph of Bagdad" (Boieldieu-Salabert). Moment musical (Schubert-Salabert). Violin Solo by M. Cantrelle: Sonata in E Minor (Veracini). Songs (Bertelin), by Mme. Georgette Diehl, accompanied by the Composer: (*a*) Une douceur splendide, (*b*) Il pleut des pétales de fleurs, (*c*) Le Chimère, (*d*) Vision Gavotte (Lully-Bizzozero). La fenêtre d'amour (de Séverac-Chapelier). Chant des bateliers (Glazounoff). Mazurka (Chopin-Mouton).

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.
12 *noon*—Gramophone Records, News and Announcements. 12.15 *p.m.*—Variety Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Popular Music on Gramophone Records, Talks and News.
7.30—The Four First Scenes of the "*Parody of Faust*," by the "Amis de Guignol à Paris." 8.30—Gramophone Records, Talk and News.
8.45—*Vocal and Orchestral Concert.* Overture, "Les Hirondelles" (Hirschmann). Waltz, Etincelles (Waldteufel). Selections from "Bouche à Bouche" (Yvain). Selection (Barlow). Selection from "Le Timbre d'argent". (Saint-Saëns). Selection from "Les Bavards" (Offenbach). Compliments from "Feuillets de Voyage" (Schmitt). Ballet, Gitanilla (Lacôme). Au temps de Haydn (Schwaab). March, King Cotton (Sousa).
10.45—News Bulletin. 10.50—(approx.)—News Bulletin.

PARIS (France)

Radio-Paris. (CFR). 174 kc/s (1,725 m.); 75 kW.
6.45 *a.m.*—Physical Culture Lesson. 7.30—Weather and Physical Culture (contd.). 7.45—Variety Music on Gramophone Records. 8.0—News, Weather and Press Review. 12 *noon*—Educational Talk.
12.30 p.m.—"Spain in Music."—A Gramophone Concert. *Part I. Spain through Spanish Eyes.* Suite, Iberia (Albéniz) by the Madrid Symphony Orchestra. Spanish Dance No. 6 (Granados) by the Madrid Symphony Orchestra. Selection from "La Vida breve" (Falla). *Part II. Spain through Russian Eyes.* Spanish Serenade (Borodin) by Lucienne Radisse. Spanish Caprice (Rimsky-Korsakoff) by the London Symphony Orchestra. *Part III. Spain through French Eyes.* La Feria (Lacôme). Seguidilla from "Carmen" (Bizet) by Ninon Vallin. Rhapsody, España (Chabrier). La Soirée dans Grenade (Debussy) by Marius François Gaillard. Prelude to "La Habañera" (Laparra) by the Frigara Orchestra. Alborada del gracioso (Ravel) by the Straram Orchestra. In the intervals at 1.0—Exchange, News and Weather and at 1.30 and 2.0—Exchange.
3.45—Exchange and Market Prices. 6.30—Market Prices, Weather, Agricultural Report and Racing Results. 7.0—Talk: The Theatre in Annam. 7.30—Medical Talk: How General Health affects the Eyes. 7.45—Commercial Prices and News. 8.0—Literary Talk with Gramophone Illustrations. 8.30—News and Weather. 8.40—Fashion Review by Mlle José.
8.45—*Concert.* Soloists: Jean Doyen (Pianoforte), M. Cahuzac (Clarinet), Mme. Gebranska (Songs), Roger Boulmé ('Cello). Pianoforte Solo: Etude on "Der Freischütz" (Weber-Heller). Symphonic Etude (Pierné). Duet for Clarinet and Pianoforte (Weber). 9.15—Press Review and News. 9.30—*Concert (contd.).* Latvian Songs. 'Cello Solos: (*a*) Adagio and Allegro (Cervette), (*b*) Les Chérubins (Couperin). Trio for Clarinet (Beethoven).

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; *Lausanne*, 442 kc/s (680 m.); and *Geneva*, 395 kc/s (760 m.).
Transmits at intervals from 11.30 a.m. 6.1 *p.m.* (from *Geneva*)—Popular Music on Gramophone Records. 6.30 (from *Lausanne*)—Agricultural Talk: Tobacco Growing. 6.55—Announcements. 7.0 (from *Lausanne*)—Medical Talk.
7.30 (from *Geneva*)—Request Concert by the Station Orchestra. In the interval at 8.15—Weather and News. 9.20—Dance Music. 10.0 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW.
Transmits at intervals from 10.0 a.m. 6.5—Concert from the Works of Tchaikovsky and Rimsky-Korsakoff. 7.0—News Bulletin.
7.30—Popular Orchestral Concert. 8.0 (in the interval)—Weather Forecast. 8.30—Concert of Light Music. 9.30 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (1RO). 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.) and 2RO, 3,750 kc/s (80 m.).
7.15—7.30 *a.m.*—Giornale Radio and Announcements. 11.0—Gramophone Records of Variety Music.
11.45—1.0 *p.m.*—*Vocal and Instrumental Concert*, by the Radio Sextet and Maria Elena Cattani (Soprano). Soprano Solos: (*a*) Heidenröslein (Schubert), (*b*) Rispettò (Benvenuti), (*c*) Hindu Song (Rimsky-Korsakoff), (*d*) Prendi la moglie e mettila in galera (Popular Tuscan Song). Selection from "Tancred" (Rossini). Serenata (Bonincontro). Momento musicale (Altavilla). Selection from "Le Maschere" (Mascagni). Was Blumen träumen (Translateur). Funeral March of a Marionette (Gounod). Pietro e Pina (Viama). In the intervals at 12.15—Giornale Radio and Exchange Quotations and at 12.30—Time and Announcements.
4.0—Exchange, Report of the Royal Geographical Society, Programme for Children, Giornale Radio and Announcements.
4.30—*Song Recital by Carlo Terni (Baritone).* Amarilli (Caccini). Serenade from "Don Giovanni" (Mozart). Aria from "Fedora" (Giordano). Aria from "Le Roi de Lahore" (Massenet).
4.45—*Variety Concert.* Roses of the South (Strauss). Malaguenita (d'Ardona), Hungarian Dances (Brahms). A Broken Heart (D'Achiardi). Admiration (Dequin). Era di Salò (Lanzetta).
5.15—Giornale dell'Enit. 5.55 (from *Naples*)—Shipping and Sports Notes. 6.0—Agricultural Notes, Weather Announcements, Giornale Radio and Press Review. 7.0—Time and Announcements. 7.5—Gramophone Records of Variety Music. 7.15—Medical Talk.
7.45 (approx.)—Relay of an Opera from the Royal Opera House. In the intervals: Humorous Items, Reading of an Arabic Tale and News Bulletin.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.); and by W2XAD on 15,340 kc/s (19.56 m.).
Transmits at intervals from 11.45 a.m. 9.0 *p.m.*—The Pilgrims, from *New York*. 9.30—Stock Reports and Police Notices. 9.45—Musical Ad Men. 9.55—News Bulletin. 10.15—"Skippy," from *New York*. 10.30—Sonata Programme from *New York*. 10.45—Florence Wightman (Harpist), from *New York*.
11.0—When Day is Done. 11.24—Time Signal. 11.25—Health Talk. 11.30—Sonata Programme. 11.45—Musical Programme. 12 *midnight* (WGY only)—New York State Educational Series. 12 *midnight* (W2XAF only)—Stock Reports and News Bulletin.
12.15—4.15 *a.m.* (*Thursday*)—*New York* Relay. 12.15 a.m.—Campbell's Orchestra. 12.30—Prince Albert Quarter Hour. 12.45—Trials of the Goldbergs. 1.0—Big Time. 1.30—Goodyear Programme. 2.0—Halsey Stuart Programme. 2.30—Mobiloil Concert. 3.0—Coca Cola Programme. 3.30—NBC Artists Service Hour. 4.0—Voice of Radio Digest.
4.15—Songs my Mother taught me. 4.30—Jack Miles and his DeWitt Clinton Orchestra. 5.0—Ralph Kirbery (Baritone), from *New York*.

WEDNESDAY
continued

5.5—Hotel New Yorker Orchestra from *New York*. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BERO-MÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).
11.28 *a.m.*—Time Signal from the Neuchâtel Observatory. 11.30—Weather and News. 11.40—"From Russia's Treasure Chest.": Symphony, Chamber and Folk Music on Gramophone Records.
12.35 *p.m.*—Weather and Exchange Quotations. 12.45—2.30—Interval. 2.30—Anglo-American Jazz on Gramophone Records. 3.0—Concert by the Station Orchestra. 4.0 (from *Zürich*)—Programme for Children. 4.30—Weather and Market Prices. 4.35—5.30—Interval.
5.30—Mengelberg and his Concertgebouw Orchestra on Gramophone Records. 6.0 (from *Berne*)—Talk: Memories of a Journey through Holland. 6.28—Time Signal and Weather. 6.30 (from *Berne*)—Talk: The Psychological Aspect of Rationalisation.
7.0 (from *Zürich*)—"*The Case against Schinderhannes*"—Radio Play (Elwenspoek).
8.0 (from Berne) — Contemporary Swiss Composers: Werner Wehrli. *Concert by the Station Orchestra*, conducted by Hermann Hofmann, with Felix Loeffel (Bass-Baritone), Theo Hug (Violin), Eugen Haupt (Horn) and Willy Girsberger (Pianoforte). Sinfonietta. Songs to Words by Hermann Hesse. Trio for Violin, Horn and Pianoforte.
9.0—Weather and News. 9.15 (from *Zürich*)—Wireless Notes. 9.30 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kw. Relayed by *Boden*, 244 kc/s (1,229.5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Östersund*, 389 kc/s (770 m.); and *Sundsvall*, 554 kc/s (542 m.).
Transmits at intervals from 6.20 a.m. 2.0 *p.m.*—The Children's Postbox. 4.15—Variety Music on Gramophone Records. 5.15—Agricultural Report. 5.45—Cabaret Programme. 6.15—Weather and News. 6.30—Talk on the following Transmission.
7.0 — "The Creation" — Oratorio (Haydn), relayed from Göteborg Cathedral. The Choir and Orchestra, conducted by Tor Mann. Soloists: Kirsten Flagstad-Hall, Folke Andersson, Elof Benktander.
8.45—Weather and News. 9.0—Dance Music Programme. 10.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.
11.30 *a.m.*—*Gramophone Concert.* Selection from "Le Pré aux Clercs" (Hérold). Selection (Darcy). Madrigal (Gaubert). Selection from "Carmen" (Bizet). Griserie (Bosc). Dreaming (Joyce). Selections (Maquis): (*a*) C'était un rêve, (*b*) Visite à Ninon. Nouveau bonheur (Irving). Your sweet smile (Ray). Selections (Bachicha): (*a*) Palermo, (*b*) Oracion. Selections (Chepfer): (*a*) Cousins de Pentecôte, (*b*) Chez le médecin. Cabanon de Suzon (Dumas). Jo the Accordion (Peysonnin). Escamillo (Goldbery). Java, (Peyronnin).
12.45 *p.m.*—News in French and German. 1.0—Time Signal.
1.2—*Gramophone Concert.* Selections from "The Pearl Fishers" (Bizet) and "Cavalleria rusticana" (Mascagni). Romance de Santuzza. Selections from "Sigurd" (Reyer). "Louise" (Charpentier). "Panurge" (Massenet), and "Parsifal" (Wagner). Soir (Fauré). Crépuscule (Almaby). Le temps des cerises (Renard). Selection from "Frasquita" (Lehár-Kreisler). Serenade (Pierné). Berceuse (Chopin). Waltz, Wienerblut (Johann Strauss). Cydalise et le chèvre-pied (Pierné). In a Persian Market (Ketelbey). Selection from "The Merry Widow" (Lehár).
2.0—4.45—No Transmission. 4.45—Talk in French.
5.0—*Orchestral Concert*, conducted by Roskam. March. Stadium (Leopold). Schneebälle (Ziehrer). Premier songe (Pelloud). Overture, "Nebuchadnezzar" (Verdi). Ave Maria (Bach-Gounod). Czardas (Salzédo). Selection from "Cavalleria rusticana" (Mascagni). Song from "Fortunio" (Messager). Selection from "Die geschiedene Frau" (Fall).
6.0—Talk in French: Rome. 6.15—Medical Talk.
6.30—*Gramophone Concert.* Selection from "Lohengrin" (Wagner). Selections (Chopin): (*a*) Waltz in C, (*b*) Etudes, Op. 25 and 10. O sole mio (di Capua). Ay, Ay, Ay (Perez-Freire). Polovtsian Dances (Borodin). Selection from "The Tale of Czar Saltana" (Rimsky-Korsakoff). 7.30—Time Signal. 7.32—News in French and German.
7.45—*Gramophone Concert.* Selections from "Das Veilchen vom Montmartre" (Kálmán). "La Tosca" (Puccini), "Cavalleria rusticana" (Mascagni), "I Pagliacci" (Leoncavallo), "L'Africaine" (Meyerbeer), "Il Trovatore" (Verdi), and "Orpheus" (Gluck). Selections (de Caro-Stubbs): (*a*) Boedo, (*b*) Orgullo Criolo. Deep River (Burleigh). Go down Moses (Bledsoe). Marche sportive (Popy).
8.30—"The Tales of Hoffmann"—Opera in Four Acts (Offenbach).
10.30—Dance Music from the Savoy. 12 *midnight*—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiburg*, 527 kc/s (570 m.).
Transmits at intervals from 5.15 a.m. 10.0 *a.m.*—News and Time Signal. 10.15—Sponsored Concert. 11.0—Weather and Snow Report. 11.5—Sponsored Concert. 11.35—Concert by the Station Orchestra, conducted by Gustav Görlich. Soloist: Paula Wagner (Contralto). 12.30 *p.m.*—Time, News, Programme Announcements and Weather Forecast, followed by Concert by the Dance Ensemble of the Stuttgart Philharmonic Orchestra. 2.30 (from *Freiburg*)—Programme for Children. 3.30 (from *Freiburg*)—Talk: The World of Plants and Animals.
4.0—(from Baden-Baden)—Concert by the Municipal Orchestra conducted by Karl Assmuss. Overture, "Prince Igor" (Borodin). Suite, Caucasian Sketches (Ippolitoff-Ivanoff). Symphonic Poem, Finlandia (Sibelius). Invitation to the Dance (Weber-Berlioz). Ballet Music from "Coppélia" (Delibes). Petite Suite (Debussy). Waltz from "The Czardas Princess" (Kálmán).
5.30—Time and Agricultural Notes. 5.40—Esperanto Lesson. 6.5 (from *Mannheim*)—Talk: Methods of Reckoning. 6.30—Time and Weather. 6.35—See *Frankfurt*.
9.25—See *Berlin* (*Witzleben*). 9.55—News, Time, Programme Announcements and Weather.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.
7.15—11.30 *a.m.*—See *Turin*.
11.30—*Gramophone Records.* Selection from "Don Pasquale" (Donizetti). Selection from "Ernani" (Verdi). Carnera (Maim).
11.45—12 *noon*—See *Turin*.
12 *noon*—*Quintet Concert.* Die kleine Kompagnie (Ganglberger). Floretera (Stafelli). Dormi bimbo mio (Cortopassi). Selection from "Mephistopheles" (Boito). Love Waltz (Ziehrer). Esmeralda (Schinelli). Odillo (Slivery).
1.0—6.5—See *Turin*. 6.5—Quintet Concert. 7.0 till Close Down—See *Turin*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.); and *Genoa*, 959 kc/s (312.8 m.).
7.15—7.30 *a.m.*—Giornale Radio.
7.30—Food Market Prices.
10.15—*Variety Concert.* Overture, "Princess Rosina" (Lincke). Bimba mia (Guetary). Zingaresca (Ellerton). Valzer andaluso (Solazzi). Song. Fantasia, Il gatto in cantina (Allegra). Ecossaise (Beethoven). Attenti all'ascensore (Amadei).
11.30—Gramophone Records of Variety Music. 11.45—Giornale Radio. 12 *noon*—Time and Announcements. 12.2 *p.m.*—Orchestral Concert. 12.45—Exchange Quotations. 1.0—Gramophone Records of Variety Music.
3.15—Giornale Radio
3.30—Recitations for Children.
3.45—Gramophone Records of Variety Music. 3.55—Concert of Chamber Music. 4.40—Talk on Art: Various Schools in Italy. 4.50—Giornale Radio and Announcements.
5.45—Agricultural Notes. 6.0—Announcements.
6.5—*Musical Selections.*—Overture (Mouton). Canzone d'aprile (Cortopassi). Selection from "Oh Kay!" (Gershwin). Cigány Serenade (Gastaldon).
6.30—Time and Announcements.
6.32—Gramophone Records of Variety Music. 7.0—Giornale Radio and Weather Forecast. 7.15—Medical Talk. 7.30—Gramophone Records of Variety Music.
7.45—Transmission of a Comedy, followed by Orchestral Concert.
10.0—Giornale Radio.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.); *Innsbruck*, 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.), and *Salzburg*, 1,373 kc/s (218 m.).
Transmits at intervals from 8.20 a.m. 6.5 *p.m.*—French Lesson. 6.35—Time, News and Weather. 6.45—Recital of Songs and Arias from Old Musical Plays. Soloist: Erika Rokyta (Soprano). Felix Petyrek at the Pianoforte. Commentary and Arrangements by Felix Petyrek.
7.25—"Madame L'Archiduc"—Opéta-Bouffe (Offenbach). In the interval at 8.15—News and Weather.
9.45—Dance Music Programme.

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.
10.20 *a.m.*—Aviation Weather Report. 10.25—Interval. 10.45—Press Review. 10.58—Time Signal, and Bugle Call from St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Light Music on Gramophone Records.
12.10 *p.m.*—Weather Forecast. 12.15—Economic Report. 12.25—Interval. 12.35—Light Music on Gramophone Records. 12.55—1.45—Interval. 1.45—Light Music on Gramophone Records. 2.15—Boy Scouts' Report. 2.20—Co-Operative Bulletin.
2.25—Historical Talk: The Development of Russia in the Eighteenth Century. 2.45—Exchange Quotations and Hydrographic Report. 2.50—Literary Talk: Mickiewicz. 3.10—Interval. 3.15—Sports Notes. 3.20—Book Review. 3.40—Light Music on Gramophone Records. 3.55—*Linguaphone English Lesson.* 4.10—Talk: Goethe and Nature, relayed from *Wilno*, 533 kc/s (563 m.).
4.35—*Concert by the Station Orchestra*, conducted by J. Ozimirsky. The Awakening of Spring (E. Bach). Flower Waltz, from the Nutcracker Suite (Tchaikovsky). Spring Song, from the "Songs without Words" (Mendelssohn). Rustle of Spring (Sinding). Love Song from "The Valkyries" (Wagner). Waltz, Frühlingsstimmen (Joh. Strauss). Ballet Music, Fête du Printemps from "Hamlet," (Thomas).
5.50—Miscellaneous Items. 6.15—Agricultural Report. 6.25—Programme Announcements. 6.30—Sports Notes. 6.35—Light Music on Gramophone Records. 6.45—Radio Journal. 7.0—Talk by R. Zrebovicz: Impressions of the Second International Chopin Competition. 7.15—Concert of Light Polish Music by the Adam Stromberg Village Orchestra. Soloist: M. Sovilsky (Tenor), accompanied by L. Urstein. 8.0—Literary Reading.
9.0—Pianoforte Quintet in F Minor, Op. 34 (Brahms), by Irene Dubiska (Violin), M. Fliederbaum (Violin), M. Szalesky (Viola), S. Adamska ('Cello) and Ign. Rosenbaum (Pianoforte). 9.30—Radio Journal. 9.35—Weather and Police Notes. 9.40—Interval. 9.45—Talk in Esperanto: Poland's Share in Universal Culture, relayed from *Cracow*, 959 kc/s (312.8 m.). 10.0—Dance Music. 11.0 (approx.)—Close Down.

WILNO (Poland)

533 kc/s (563 m.); 16 kW.
10.58 *a.m.*—Time Signal. 1.10 *p.m.*—Programme Announcements. 1.15—Famous Soloists on Gramophone Records. 2.15—See *Warsaw*. 3.10—Light Music on Gramophone Records. 3.15—See *Warsaw*. 3.20—Talk: The Radio in a Hairdressing Establishment. 3.40—Reading. 3.55—See *Warsaw*. 4.10—Talk: Goethe and Nature. 4.35—See *Warsaw*. 5.50—A Report. 6.0—Lithuanian Review. 6.15—Selections from the Works of Falla on Gramophone Records. 6.20—Talk: Our Sorrows. 6.30—See *Warsaw*. 6.35—Programme Announcements and Miscellaneous Items. 6.45—See *Warsaw*. 1.10 (approx.)—Close Down.

THURSDAY (March 31)

PRINCIPAL EVENTS

SYMPHONY CONCERTS

7.0 p.m. Schweizerischer Landessender: Haydn Concert.
7.30 ,, Breslau: Haydn Concert (Schlesische Philharmonic).
7.45 ,, Rome: Beethoven Concert.
8.0 ,, Stuttgart, Frankfurt: Haydn Programme (Philharmonic Orchestra).

CONCERTS (Vocal and Instrumental)

11.0 a.m. Vienna, Breslau, Heilsberg, Langenberg: Haydn Commemoration Concert, (Vienna Philharmonic Orchestra, conductor Clemens Krauss).
5.0 p.m. Strasbourg: Jazz Music.
7.0 ,, Bucharest: "The Creation" (Haydn).
7.10 ,, Copenhagen: Haydn Concert.
7.10 ,, Munich: "Pfalz" Orchestra (Soloist: Emmy Bettendorf).
7.30 ,, Langenberg: From Suppé's operettas.

OPERAS

8.0 p.m. Italian Stations (Northern): Opera relay.
8.0 ,, Palermo: Opera relay from the Teatro Massimo Vittorio Emanuele.

CHAMBER MUSIC

7.0 p.m. Hamburg: Haydn Trio and Quartet.
8.15 ,, Stockholm: Debussy, Sonata for flute, violin and harp.

RECITALS

5.25 p.m. Huizen: 'Cello and Pianoforte.
6.30 ,, Heilsberg: Pianoforte Sonatas (Haydn).

PLAYS AND TALKS

7.0 p.m. Heilsberg: "Das Spiel von Lanzelot, Fürsten von Dänemark, und der schönen Sanderein."
8.45 ,, Rome: "La vittima" (Zambaldi).
9.0 ,, Radio-Paris: "The Retreat" (Bayerlein).

MISCELLANEOUS

8.0 p.m. Leipzig, Heilsberg: "Haydn-Commemoration Programme.

Haydn's *Gipsy Rondo*

Although claimed as one of the great German masters of music, Haydn was really a Croatian by birth—Slav rather than Teuton, and in many places throughout his music he made use of folk tunes from his own picturesque part of the world. It is the last movement which gives this universally beloved Trio its name of *The Gipsy Rondo*. The first movement is a merry *allegro*, not so brisk nor played at such great speed as some of his quick movements, but with nothing of the gipsy element about it. Nor is the slow movement marked by any difference from the usual finely melodious piece which Haydn can give us in such places. But the sparkling verve and energy of the last movement are unmistakably gipsy-like in character, and with its capricious changes from the major to the minor key, and its hurrying, excited rhythm, it has a really infectious sense, as much as some far more elaborate modern music may claim, of the wild native gipsy music. It is to be broadcast in a chamber music programme along with one of the String Quartets, from HAMBURG this evening.

Photo.: Postlug, Vienna

Beethoven's House, Eroika Gasse Vienna

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 *a.m.*—The Daily Service.
10.30—10.45—Time Signal (Greenwich); Shipping Forecast.
12 *noon*—Reginald Foort at the Organ.
1.0 *p.m.*—Time Signal (Greenwich).
1.0—The Shepherd's Bush Pavilion Orchestra, directed by Harry Fryer.
1.45—"The Problem of the Difficult Child"—VII.
2.0—2.30—Gramophone Records.
3.0—Evensong from Westminster Abbey.
3.45—The B.B.C. Dance Orchestra.
4.30—The Grosvenor House Orchestra, directed by Joseph Meeus.
4.45—Time Signal (Greenwich).
5.15 (Daventry)—The Children's Hour.
5.15 (London and Northern)—Dance Music.
6.0—"The First News."
6.30—Time Signal (Greenwich).
6.30—The Foundations of Music. Haydn Pianoforte Sonatas.
6.50—Felix Aylmer in "The Rhyme of the Ancient Mariner," by S. T. Coleridge.
7.20—Weekly Special Notices.
7.30—"The Gipsy Baron" ("Der Zigeunerbaron"). **An Operetta. Music by Johann Strauss.** Translated and adapted for broadcasting by Henrik Ege. Dialogue revised for broadcasting by Gordon McConnel. Conductor, Adrian Boult.
9.0—Time Signal (Greenwich).
9.0—"The Second News."
9.15—Shipping Forecast; New York Stock Market Report.
9.20—"The Way of the World." Mr. Vernon Bartlett.
9.35—An Instrumental Recital. Winifred Small (Violin). Maurice Cole (Pianoforte).
10.30—A Short Service, conducted by the Rev. W. H. Elliott.
10.45—12 *midnight*—Dance Music. The B.B.C. Dance Orchestra.
11.30—Time Signal (Greenwich).
12 *midnight*—12.5 *a.m.* (*Friday*)—Experimental Transmission by the Fultograph Process.

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 *a.m.* (London and Northern)—The Daily Service.
10.30—10.45 (London and Northern) Daventry National Programme.
11.30—12 *noon* (London)—Experimental Television Transmission (Baird Process) (356.3 m. Vision; 261.3 m. Sound).
12 *noon*—Ernest Parsons and his Orchestra.
1.0 *p.m.*—The Northern Studio Orchestra. Stella Taggart (Soprano).
2.0—3.0—Laddie Clarke's Imperial Hydro Hotel Orchestra.
3.0 (London)—Daventry National Programme.
3.0 (Northern)—The Studio Orchestra.
3.30 (Northern)—Mrs. Christian: Readings from "The Vicar of Wakefield."
3.45 (Northern)—Daventry National Programme.
5.15—The Children's Hour.
6.0—"The First News."
6.30—Regional Bulletin for Farmers.
6.35 (Northern and London)—The Irwell Springs (Bacup) Band, Harold Noble (Baritone).
6.35 (Midland)—Pattison's Salon Orchestra, under the direction of Norris Stanley.
7.30—A Symphony Concert. The City of Birmingham Orchestra conducted by Leslie Heward. **Leon Zighera (Violin).**
8.0 (London and Northern)—Chamber Music. Sarah Fischer (Soprano). The Kutcher String Quartet.
9.15 (London)—On With the Dance II.—Waltzes, 1780-1932. The B.B.C. Theatre Orchestra. Conductor, Leslie Woodgate.
9.15 (Northern)—The Yorkshire Mummers.
9.40 (approx.) (Midland)—"Humour in Songs." A Recital by Frank Lester (Baritone).
10.15—"The Second News."
10.35—11.0 (Midland)—As London.
10.35—12 *midnight* (London and Northern)—Dance Music.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.
7.30—8.30 *a.m.*—Topical Review. 11.0—Chimes and Weather. 11.15—1.0 *p.m.*—Interval. 1.0—Light Music on Gramophone Records.
1.30—*Concert by the Station Sextet.* March (Sousa). Serenade from Quartet No. 12 (Haydn). Selection from "The Magic Flute" (Mozart). Andante for Violin and Orchestra from the Symphonie Espagnole (Lalo). Soloist: Señor Jarque.
2.0—Theatre Notes, Light Music on Gramophone Records. 2.15—Film Review and Sextet Concert (contd). 2.50—Labour Exchange Report. 4.0—7.0—Interval.
7.0—*Concert by the Station Trio.* Trio No. 3 in C (Haydn). 7.30—Exchange Quotations and *English Lesson.* 8.0—Request Gramophone Concert. 9.0—Chimes and Weather. 9.5—Concert by the Station Orchestra. 9.30—Recital of Flamenco Songs.
10.0—*Haydn Festival Concert*, in commemoration of the Bi-Centenary of his Birth, by the Station Orchestra. Soloists: Edelburg Massmann (Vocalist), German Brunig (Tenor). Quartet in D Major, No. 49, Op. 50, No. 6. Arias from (*a*) "The Seven Last Words," (*b*) "The Messiah." Tenor Solos: Aria from "The Seasons." Minuet from the Symphony in G Major. Arias from "The Messiah." Tenor Solos: Aria from "The Seasons" and Aria from "The Creation." Quartet in A Major, No. 7, Op. 2. 12 *midnight* (approx.)—Close Down.

BELGRADE (Yugoslavia)

607 kc/s (430.4 m.) 2.5 kW.
Transmits at intervals from 10.0 a.m. 5.55 *p.m.*—Time Signal and Programme Announcements. 6.0—French Conversation. 6.30—Gymnastics. 7.0—Medical Talk. 7.30—Dance Music relayed from the Ruski Car Restaurant. 7.50—Talk on Haydn.
8.10—Concert of Haydn's Works. Soloists: Frau Lisa Popova (Vocalist), Prof. Vladimir Slatin (Violin), Jakov Srejovic (Flute) and Alexander Butakoff (Piano). Sonata in D Major for Violin and Pianoforte. Songs: (*a*) Das Leben ist ein. Traum, (*b*) Die Treue, (*c*) Gebet zu Gott, (*d*) Stets barg die Liebe sie. Sonata in G Major for Flute and Pianoforte. Songs: (*a*) Englisches Matrosenlied, (*b*) O süsser Tou, (*c*) Ruckerinnerung.
9.25—News and Sports Notes. 9.45 *Concert by the Station Orchestra.* First Indian Suite (Lüling). 'Cello Solo: Musette (Offenbach). Minuet for Two Violins and Orchestra (Schebek). Waltz, Wienerblut (Johann Strauss).

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.
Transmits at intervals from 5.25 a.m. (*Hamburg* Relay.)
3.30 *p.m.*—See *Berlin* (*Witzleben*). 4.30—Talk: The Value of Modern Artists in connexion with the Autobiographies of Nolde and Barlach. 5.0—Talk by W. Mütze. 5.30—Advanced Spanish Lesson. 5.55—Weather for Farmers. 6.0—Talk on Music. 6.20—Forecast of the April Radio Programmes. 6.30—Agricultural Talk. 6.55—Weather Forecast. 7.0—Concert from *Leipzig*.
8.0—See Leipzig. 9.30—News Bulletin followed by Concert rom *Berlin* (*Witzleben*).

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert.)
3.30 *p.m.*—Concert of Light Music. 4.30—Talk for Young People. 4.50—Reading of Prose.
5.15—Josef Haydn—Concert of Chamber Music. Sonata in G Major for Flute and Pianoforte. Pianoforte Sonata in C Minor. Scottish Trio Songs for Soprano, Violin, 'Cello and Pianoforte. Trio in G Major for Two Flutes and 'Cello.
5.55—"The Witzleben Station informs its Listeners . . ." 6.0—Topical Talk. 6.10—Talk on Haydn, for the Bi-Centenary of his Birth. 6.40—Dances from Vienna—Concert by the Berlin Wireless Orchestra conducted by Victor Schwarz. 8.0—News and Sports Notes. 8.10—A Radio Calendar for March, conducted by E. Köppen. 9.10—News Bulletin, followed by Concert of Dances and Marches by Tchaikovsky.

BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW.
12.45 *p.m.*—Septet Concert. In the interval, News Bulletin. 1.50—Exchange Quotations. 2.0—Light Music on Gramophone Records. 4.30—Programme for Children. 7.30—News and Exchange. 7.40—Talk arranged by the International Labour Bureau. 7.55—Lottery and Charades Results. 8.0—Light Music on Gramophone Records. 8.15—News and Weather Forecast.
8.30—*Concert of Music from Operas on Gramophone Records.* Selection from "Cavalleria Rusticana" (Mascagni). Aria from "Louise" (Charpentier). Selection from "Blue Beard" (Offenbach).
9.0—"*Exaltation*"—Comedy in Three Acts (Louis Schneider). After the Programme, Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).
Transmits at intervals from 5.30 a.m.
3.25 *p.m.*—*Orchestral Concert.* conducted by Franz Marszalek. Basque Rhapsody (Pierné). Scherzo Sonnenkind und Wolkenmann, (Clemus). Albumblatt (de Micheli). Old German Gavotte (Lüling). Waltz, Die Hydropathen (Gung'l). A Godard Cycle (Urbach). Overture, "Semiramis" (Rossini). Mazurka (Grünfeld).
4.40—Agricultural Prices. 4.45—Book Review. 5.0—Talk: A Sentimental Journey to Budapest.
5.20—"*Haydn's Skull*"—A Sketch (Leitich). 5.30—Talk for Workers: The Tariff Treaty. 5.55—Weather for Farmers.
5.57—*Orchestral Concert* conducted by Franz Marszalek. Overture, The Hebrides (Mendelssohn). Potpourri of Scottish Folk Songs (Lampe). Melody (Azzoni). Mignonnette (Mommaert). Selection from "Der Frauenfresser" (Eysler). Selection from "Feramors" (Rubinstein). March of the Dwarfs from "Laurin" (Moszkovsky).
7.0—Weather Forecast. 7.2—Talk by Dr. Hans Kayser.
7.30—Haydn Concert by the Silesian Philharmonic Orchestra conducted by Dr. Georg Dohm, relayed from the Castle Museum.

Soloists: Elisabeth Laube (Soprano) and Gertrud Wertheim (Cembalo). Symphony in G Major. Two Arias for Soprano and Orchestra. Concerto for Cembalo and Orchestra. Three Songs for Soprano and Cembalo. Symphony Concertante in B Flat Major for Violin, 'Cello, Oboe, Bassoon and Orchestra: (*a*) Allegro, (*b*) Andante, (*c*) Allegro con spirito.
9.20—Time and News. 9.40—Talk in Esperanto: The Waldenburg Mountain District. 9.50—Talk on Tennis. 10.5 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.
12.15—1.45 *p.m.*—Weather and *Gramophone Concert of Haydn's Works.* The Surprise Symphony: (*a*) Adagio cantabile vivace assai, (*b*) Andante, (*c*) Minuet, (*d*) Allegro di Molto. Minuet in E. Adagio from the Concerto in D. Trio in G. Selection from the Emperor Quartet. Fantasia in D Minor. Reiter Quartet Op. 74 No. 3: (*a*) Allegro, (*b*) Largo, (*c*) Minuetto, (*d*) Finale. Selection from "The Creation." First Movement from The Clock Symphony.
5.0—*Orchestral Concert* conducted by Mr. Meulemans. March, Holidays (Lauweryns). Overture, "Le Grand Mogol" (Audran). Selections (Jongen-Mouton): (*a*) Presqu'une berceuse, (*b*) Poudre de Riz. Selection from "H.R.H." (Caryll). En badinant (d'Ambrosio). Scherzetto (Demaret). Waltz, Serments d'amour (Allier). Neapolitan Dance (Desormes).
5.45—Gramophone Records for Children. 6.15—Talk and Recitations.
6.30—*Gramophone Concert.* Overture, "Benvenuto Cellini" (Berlioz). Hungarian March from "The Damnation of Faust" (Berlioz). Waltz, The Good Old Times (Strauss). Waltz, Hofballtänze (Lanner). Two Humorous Military Scenes: (*a*) The Theory, (*b*) The General's Inspection. Motives from Central Russia (Michaelovsky). Variety Item. Lolita (Buzzi-Peccia). Il Bacio (Arditi). Waltz, Roses of the South (Strauss). At your command (Barris). Sweet and Lovely (Arnheim). 7.30—Review of International Events.
8.0—*Concert by the Station Symphony Orchestra* conducted by Mr. André. Soloists: Mlle. Gravis (Vocalist) and Mr. G. Valentin (Tenor). Overture, "A Midsummer Night's Dream" (Mendelssohn). Second Suite for Orchestra (de Micheli). Songs from (*a*) "Les Dragons de Villars" (Maillart), (*b*) "La Vivandière" (Godard). Serenade (Toselli). Waltz, Il Bacio (Arditi). Selection from "Le Roi d'Ys" (Lalo). Tenor Solos: (*a*) Les Semailles (Goublier), (*b*) Song (Lehar). Pas des fleurs (Delibes). Selection from "La Belle Hélène" (Offenbach). Tenor Solos: (*a*) Aria from "Les Millions d'Arlequin" (Drigo), (*b*) Vous êtes jolie (Tagliafico). Waltz, Wine, Woman and Song (Joh. Strauss). Romance (Tchaikovsky). L'anneau d'argent (Chaminade). Bonsoir (Guillemin). Arab Dances (Montague-Ring). Selections from "Le Train Bleu" (Milhaud). In the interval at 8.45—Talk. 10.0—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.
12.15—1.45 *p.m.*—Weather Forecast and Gramophone Concert.
5.0—Concert by the Station Orchestra. 5.45—Programme for Children.
6.30—Gramophone Concert. 7.15—Talk on Youth Organisations. 7.30—Journal Parlé.
8.0—*Concert by the Station Orchestra.* Overture, "Light Cavalry" (Suppé) Selection from "La Vie Parisienne" (Offenbach). Vocal, Choral and Instrumental Selections by the "Pogen" Society. 8.45—Talk.
9.0—*Concert (contd.).* Tales from the Vienna Woods (Strauss). Waltz, La Hussarde (Ganne). Selections by the "Pogen" Society. The Skaters (Waldteufel). Chinese Street Serenade (Siede). K.V.R.O. Strijdlied (Meulemans).
9.55—Evening Prayer. 10.0—Journal Parlé.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.
11.0 *a.m.*—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 *noon*—Popular Music on Gramophone Records.
4.0 *p.m.*—Orchestral Concert. 5.0—News and Time Signal. 5.10—Concert (contd). 6.0—Educational Talks on Art and Music. 6.40—Light Music on Gramophone Records.
7.0—"The Creation" Oratorio (Haydn), by the Station Orchestra and the Carmen Choir. Soloists: Mme. Rosi Baumann Radulesco, Aurel Alexandresco and Stefanescu Goanga. 9.0—News Bulletin.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW.
Programme also relayed on 210 m. from 4.0—4.30 and 6.30—11.0 p.m.
8.15 *a.m.*—Concert by Livia Csilley (Vocalist), S. Gaspar (Violin and Imre Ungar (Pianoforte). Accompanist, T. Polgar. 10.10—Tidal Report. 11.0—Chimes. 11.5—Concert by the Joska Radics Cigány Orchestra. 3.0 *p.m.*—Reading: Animal Stories. 4.0—Agricultural Talk.
4.30—*Orchestral Concert*, conducted by Wilhelms Komor. March (Donath). Auf der grauen Donau (Lehár). Selection from "The Queen's Kerchief" (Johann Strauss). Selection from "The Rose of Stamboul" (Fall). Nocturne. (Siegmann). Suraya—an Oriental Dance Scene (Siede). Selection (Joyce). Ukrainian Pictures (Akimenko). Canary polka (Poliakin). Merry March Potpourri (Komzak).
6.0—*English Lesson.* 6.30—Italian Songs on Gramophone Records.
7.0—A Play in the Studio, followed by Concert by the Eugen Farkas Cigány Band, from the Hotel Spolarich.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.
See *Langenberg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).
6.30 *a.m.*—Morning Gymnastics. 7.30—Divine Service from the Cathedral. 10.0—Weather Forecast. 10.10—Angling Notes. 10.15—Talk for Schools. 11.0—Time and Chimes from the Town Hall. 11.5—1.0 *p.m.*—String Ensemble Concert from the Wivex Restaurant.
2.0—*Concert by Louis Preil's Instrumental Ensemble.* Soloist: Giddy Heilmann (Vocalist). Overture, "Djamileh" (Bizet). Gipsy Melodies (Dvorák). Curly (Powell). Selection from "The Rose of Stamboul" (Fall). Jeg gik mig i Skoven (Andersen). Nu brister i alle de Klöfter (Thrane). Spanish March, Hispania (Dreyer). Seven Swedish Folk Songs. Hoch lebe der Tanz (Waldteufel.) Poème d'Extase (Bullerian). En Engel har rört ved din Pande (Lange-Müller). Selection from "The Little Mermaid" (Henriques). Serenade (Halvorsen). Spring Idyll (Delmas). March, Per aspera ad astra (Urbach).
4.0—Programme for Boys. 4.40—Exchange and Fish Market Prices.
4.50—Talk in French: The French Art Exhibition in London. 5.20—*English Lesson for Beginners.* 5.50—Weather Forecast. 6.0—News Bulletin. 6.15—Time Signal. 6.16—Danish Lesson. 6.40—Talk on Joseph Haydn.
7.10—Haydn Concert for the Bi-Centenary of the Composer's Birth, by Tenna Frederiksen Kraft and Ingeborg Steffensen (Vocalists) and the Thorvald Nielsen Quartet. Pianoforte Sonata in E Flat Major, Op. 82. Scottish Songs for Soprano, Contralto and Strings. String Quartet in B Flat Major, Op. 76, No. 4.
8.20—A Radio Play (Hans Kafka).
9.0—News Bulletin.
9.15—*Orchestral Concert, conducted by Launy Gröndahl.* Overture and Ballet Music from "Aladdin" (Horneman). Suite in A Minor for String Orchestra (Nielsen): (*a*) Prelude, (*b*) Intermezzo, (*c*) Finale. Prelude to the Second Act of "Saul and David" (Nielsen).
9.55—Dance Music from the Palace Hotel. 11.0—Time and Chimes from the Town Hall. 11.5—Dance Music (continued). 11.30 (approx.)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).
1.30 *p.m.*—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records. 2.0—6.0—Interval. 6.0—Popular Music on Gramophone Records. 6.15—Programme for Children. 7.0—Popular Music on Gramophone Records. 7.10—News Bulletin. 7.30—Time Signal. 7.31—French Lesson.
7.45—Selections by the Station Sextet. 8.0—Songs by Cecily Kenny Soprano). 8.15—Pianoforte Solos by Carmel Turner. 8.30—Songs by R. W. Cobbe (Baritone). 8.45—Literary and Dramatic Talk.

THURSDAY
continued

9.0—"*The Maid of Honour*"—Sketch, by Elizabeth Young and Company. 9.30—Sponsored Programme. 10.30—Time Signal, News, Weather Report and Close Down.

FÉCAMP (France)

Radio Normandie. 1,364 kc/s (219.9 m.); 1 kW.
Transmits at intervals from 12 noon.
7.30 *p.m.*—Gramophone Records of Light Music. 7.45—Local News. 8.0—Popular Music on Gramophone Records. 8.15—News Bulletin. 8.30—Concert relayed from *Rouen.*
12 *midnight*—Concert of Variety Music.
1.0 *a.m.* (approx.)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.).
Transmits at intervals from 5.15 a.m.
2.30 *p.m.*—Programme for Children.
3.25—Economic Notes.
3.30—*Orchestral Concert* relayed from the Kurhaus, *Wiesbaden.* Dramatic Overture (Bizet). Ballet Suite, Uber allen Zauber Liebe (Lassen). Fantasia on the Works of Mendelssohn (Dupont). Variations on the Emperor Quartet (Haydn). Overture, "Die Nibelungen" (Dorn). Waltz from "Der Waldmeister" (Johann Strauss). Selection from "The Flying Dutchman" (Wagner). March, Der alte Fritz (von Blon).
5.30—Economic Notes. 5.40—Review of Cinema Books. 6.5—Talk: England off the Gold Standard. 6.30—Time Signal, Programme Announcements, Weather and Economic Notes. 6.45—10.30—See *Stuttgart.* In the interval at 9.20—Time Signal, Weather, News and Sports Notes. 10.30 (approx.).—Close Down.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.); and *Kiel*, 1,292 kc/s (232.2 m.).
Transmits at intervals from 5.30 a.m. (Weather and Concert).
10.0 *a.m.* (from *Bremen*)—*Concert by the Little String Orchestra*, conducted by Reinhold Krug. Overture "Barbe Bleue" (Offenbach). Die Hydropathen (Gungl). Scène passionée (Becce). Selection from "The Maid of the Black Forest" (Jessel).
10.40—Time, Weather and Winter Sports Notes. 10.50—Exchange Quotations. 11.0—Official Celebrations in Honour of Joseph Haydn, relayed from *Vienna.* 12.15 *p.m.*—Sponsored Programme. 1.0—Ice Report and News. 2.0—Weather Report. 2.5—Exchange Quotations. 2.35—Shipping News. 3.0—Programme for Children. 3.30—Talk: Speech, Writing and Reading. 3.55—Talk: Gottfried Keller and his Sister Regula. 4.20 (from *Kiel*)—Dance Music. 5.30—Talk with Musical Illustrations: Josef Haydn's Town. 5.55 (from *Hanover*)—Health Talk. 6.20—Frankfurt Exchange and Hamburg Egg Market Prices. 6.25—Weather Report. 6.30—Josef Buchhorn reads from his own Works.
7.0—Haydn Concert for the Bi-Centenary of his Birth, by Alexander Schneider (First Violin), Susanne Lachmann (Second Violin), Ernst Doberitz (Viola) and Arthur Tröster ('Cello). Pianoforte Trio in G Major. String Quartet in D Major.
7.45—"The Humour of Great Composers"—Concert with Commentary by Walther Schneider. Haydn: Finale from the Oxford Symphony for Two Pianofortes. Mozart: Trio, Das Bandl. Beethoven: Der Kuss. Reger: Burlesque, Ach du lieber Augustin, for Two Pianofortes. Richard Strauss: Für fünfzehn Pfennige. 9.0—News Bulletin. 9.20—Topical Talk.
9.30—*Orchestral Concert*, conducted by Horst Platen. Polonaise (Drigo). Minuet (Boccherini). Waltz in Old Style (Burmester). Gavotte, Sträussle (Humperdinck). Waltz from "Der liebe Augustin" (Fall) Onestep from "The Czardas Princess" (Kálmán). Blues from "Nanon" (Gené). Waltz, La Coquette (Gillet). Gay Dance Suite (Erdlen). Waltz from "Der Rastelbinder" (Lehár). Waltz, Destiny (Baynes). Waltz from "The Czardas Princess" (Kálmán). Waltz, Ballsirenen (Lehár). In the interval at 10.20—Ice Report.

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).
Transmits at intervals from 5.30 a.m. (Gymnastics and Gramophone Concert).
10.0 *a.m.*—"*From Scandinavia*"—*Concert by the Orag Orchestra*, conducted by Eugen Wilcken. Overture, Nachklänge aus Ossian (Gade). Scandinavian Lyric Suite (Palmgren). Valse triste and Entr'acte (Sibelius). Prayer and Temple Dance from "Olav Trygvason" (Grieg). Suite, Aus dem Nordland (Frederiksen).
11.0—Haydn Programme, relayed from Vienna, followed by Gramophone Records of Variety Music.
1.30—2.45 *p.m.*—Interval. 2.45—Talk for Young People.
3.0—Concert by the Königsberg Opera House Orchestra, conducted by Werner Franz. 4.30—Review of Books. 5.0—Review of "Poland, Prussia and Germany," by Friedrich Schinkel. 5.15—Ice Report and Market Prices. 5.30—Agricultural Talk. 6.0—*English Conversation.*
6.30—Haydn's Pianoforte Sonatas IV—Recital by Rudolph Winkler on the Bi-Centenary of the Composer's Death. Sonata in G Major. Sonata in E Flat Major. Sonata in E Major.
6.55—Weather Forecast. **7.0—"The Play of Lancelot, Prince of Denmark, and the Beautiful Sanderein"**—Play, translated from the Flemish by Friedrich Markus Huebner.
8.0—See Leipzig. 9.10—News Bulletin.

HILVERSUM (Holland)

160 kc/s (1,875 m.); 8.5 kW. (transmitted from *Huizen*).
Programme of the Algemeene Vereeniging Radio Omroep (A.V.R.O).
7.40 *a.m.*—Time Signal. 7.41—Gramophone Records of Light Music. 9.40—Daily Service. 9.55—Light Music on Gramophone Records.
10.10—*Concert.* Toos van Veen (Vocalist), Leo Wolfsbergen (Vocalist) and Egbert Veen (Pianoforte). Songs by Toos van Veen: (*a*) Aria from "Floridante" (Händel), (*b*) Aria from "The Marriage of Figaro" (Mozart), (*c*) Aria from "The Seasons" (Haydn). Songs by Leo Wolfsbergen: (*a*) Two Songs (E. Wolff), (*b*) Das gelbe Laub erzittert (Grieg), (*c*) Herbststimmung (Grieg). 10.40—Recitations by Rolien Numan. 11.10—*Concert (contd.).* Songs by Toos van Veen: (*a*) Im wunderschönen Monat Mai (Schumann), (*b*) Vergebliches Ständchen (Brahms), (*c*) Butterfly Song (de Campra). Schubert Songs by Leo Wolfsbergen: (*a*) An die Musik, (*b*) Der Doppelgänger, (*c*) Pax Vobiscum, (*d*) Stürmische Morgen, (*e*) Der Kreuzzug. 11.40—Time Signal.
11.41—*Concert by the Station Orchestra*, conducted by Nico Treep. Overture, "Preciosa" (Weber). Erinnerung an Chopin (Petras). Waltz, Künstlerleben (Johann Strauss). Gramophone Records of Popular Music. Selection from "Le tribut de Zamora" (Gounod). Ballet des Parfums (Popy). Aubade printanière (Lacôme). La Danza (Rossini). Gramophone Records of Popular Music. Selection from "Il Trovatore" (Verdi). Waltz, Flott durch's Leben (Translateur), March, Bella Vista (Morena).
1.40—2.10 *p.m.*—Interval. 2.10—Talk to be announced).
3.10—*Recital of Songs* by Geertruida van Vladeracken, with Pianoforte accompaniment by Jan Poortenaar. Altes Mailied in der Bittwoche (arr. Reimann). Aria (Händel). To Sylvia (Schubert). O Nuit, plus belle que le Jour (arranged by Rummel). Jardin d'amour (arranged by G. van Vladeracken). L'Amour de moi (Tiersot). Scottish Folk Songs: (*a*) Annie Laurie, (*b*) Cradle Song, (*c*) Turn ye to me.
3.40—Programme for Hospitals.
4.40—*Concert by the Station Chamber Orchestra*, conducted by Louis Schmidt. Overture, "La Cenerentola" (Rossini). Suite, Musical Sketches (Missa). Spring Serenade (Drdla). Serenata Morisca (Chapi-Reynoso). Selection from "Pique Dame" (Tchaikovsky). Selection (Lehár). Waltz, Mein Lebenslauf ist Lieb und Lust (Josef Strauss). American Patrol (Meacham). In the interval, Songs by Charlotte Jaeckel. 6.10—Sports Talk. 6.40—*Concert (continued).* Potpourri, Eine Sängerfahrt nach Wien (Silving). Dona Vatra (Köpping). Serenade (Metra). Attila (Fucik).
7.10—Talk (to be announced). 7.40—Time Signal. 7.41—Light Music on Gramophone Records.
7.55—Concert by the Concertgebouw Orchestra, conducted by Willem Mengelberg, relayed from the Concertgebouw, *Amsterdam.* Soloist: Maria Ivogun (Soprano). Symphony (Haydn). Soprano Solo: Aria (Mozart). In Three-Four Time (Wagenaar). Soprano Solo: Aria (Richard Strauss). Dance from "Salome" (Richard Strauss). In the interval, Selections by a Male Voice Choir.
10.10—Weather Report and News Bulletin. 10.20—Light Music on Gramophone Records. 10.40—Concert of Light Music, relayed from the Restaurant Heack. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

1,004 kc/s (298.8 m.); 8.5 kW. (transmitted from Hilversum).
7.40—8.55 *a.m.*—Programme of the Catholic Radio Society (K.R.O.). Variety Music on Gramophone Records. 9.40—10.40—Programme of the Christian Radio Society (N.C.R.V.). 9.40—Popular Music on Gramophone Records. 9.55—Programme for Invalids. 10.25—Variety Music on Gramophone Records. 10.40 *a.m.*—1.40 *p.m.*—K.R.O. Programme. 10.40—Popular Music on Gramophone Records. 11.10—Religious Address. 11.40—Police Notes.
11.55—*Orchestral Concert conducted by Johan Gerritsen.* Unter dem Siegesbanner (G. F. Wagner). Preludes to the First and Fourth Acts of "Carmen" (Bizet). Valse caprice (Rubinstein). Gavotte, Wenn der Flieder blüht (Heinecke). Scènes alsaciennes (Massenet). Nocturne (Christ). Overture, "Le Roi l'a dit" (Delibes). Waltz, Manöverklänge (Fetras). Polish National Dances (Scharwenka). Viennese Operetta Revue (Robrecht).
1.40 *p.m.* till Close Down—N.C.R.V. Programme. 1.40—Talk on Spare-time Hobbies. 2.40—Programme for Women. 3.10—3.40—Interval. 3.40—Programme for Invalids. 4.40—Programme for Young People.
5.25—'Cello and Pianoforte Recital by H. Franke ('Cello) and A. Hendriks (Pianoforte). Sonata for Pianoforte and 'Cello (Antoinotti). Variations on a Theme by Dupont (Mozart). Two Selections from the Sonata, Op. 36 (Grieg). Melody Op. 20, No. 1 (Glazounoff). Ballad, Op. 11 (Kuyper). 6.25—Dressmaking Lesson. 6.40—Answers to Correspondence. 7.10—Police Notes.
7.40—*Concert by the "Weesper" Male Voice Choir, conducted by J. Boon.* Ecce Quomodo Moritur (Händel). Sonntagmorgen auf der Heide (Kreutzer). Cradle Song (Brahms). Petras Klage (Brandts-Buys). Hymn to the Night (de Rille). Onweer (Roeske). Selection (Hertog). 8.40—Talk. 9.10—*Concert (continued).* Three Flemish Songs (de Clercq). Soldiers' Chorus from "Faust" (Gounod). Tehuis (Bonset). Jerusalem (Olman) 9.40—News Bulletin. 10.10—Variety Music on Gramophone Records. 11.10 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See *Copenhagen.*

LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
Transmits at intervals from 5.45 a.m. (Exercises, Weather, Time and Gramophone Concert).
10.20 *a.m.*—*Gramophone Concert.* Selections from "Die Fledermaus" (Johann Strauss), by Edith Lorand and her Orchestra. La capricieuse (Elgar), by Bronislav Hubermann (Violin). Duet from "The Tales of Hoffmann" (Offenbach), by Emmy Bettendorf (Soprano) and Herbert Ernst Groh (Tenor). Waltz from "Gasparone" (Millöcker), by Barnabas von Geczy and his Orchestra. Selection from "Die Blume von Hawaii," (Abraham). Stephanie-Gavotte (Czibulka), by Edith Lorand and her Orchestra Song from "The Song of Love" Johann Strauss-Korngold), by Herbert Ernst Groh (Tenor). March, Mein Oesterreich (Reis), by the Parlophone Orchestra, conducted by Otto Dobrindt.
11.0—Haydn Commemoration Programme relayed from Vienna.
12.15 *p.m.*—Weather, Announcements and Time Signal.
12.25—*Concert, conducted by Eysoldt.* Overture, "Prince Igor" (Borodin). Symphonic Poem, Les Préludes (Liszt). Scenes from "Hérodiade" (Massenet). Shadnw Dance from "Dinorah" (Meyerbeer). Duet from "As you like it" (Wetzler). Waltz, Natursänger

THURSDAY continued

(Ziehrer). Ballet Suite, Esmeralda (Drigo). Kalman Potpourri, Fortissimo (Feigel).
1.30—Sponsored Programme on Gramophone Records. 2.30—Economic Notes and Time Signal. 2.50—Programme for Children. 3.20—Talk: Looping the Loop. 3.40—Gardening Talk. 4.0—Concert by the Station Orchestra. 5.15—Talk on Social Politics. 5.40—Italian Lesson. 6.0—Weather, Time, Economic and Sports Notes. 6.15—Young Socialists in Germany—a Report on Gramophone Records. 6.55—First News.
7.0—*Concert, conducted by Wolf.* Overture, "William Tell" Rossini). Selections from "The Magic Flute" (Mozart). Italian Waltz (Strauss).
7.30—Concert from Suppé's Operettas, by Maria Horstwig (Soprano), Mario Haindorf (Tenor), Anton Innkamp (Bass) and the Münster Municipal Orchestra, conducted by Wolf. Commentary by Dr. Ernst Römer. 9.0—News Bulletin, followed by Concert. 10.0—Concert from the Café Corso, *Aachen*. 11.0 (approx.)—Close Down.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.). Transmits at intervals from 5.30 a.m. (*Witzleben* Relay.)
3.0 *p.m.*—See *Heilsberg*. 4.30—Weather and Time. 4.50—Economic Notes. 5.0—Medical Talk. 5.15—Talk on Taxation. 5.50—Talk: European Wireless Stations and Fading. 6.5—Talk: Altered Working Conditions
6.30—*Concert by the Leipzig Symphony Orchestra conducted by Johannes Fritzsche.* Overture, "King Manfred" (Reinecke). Peer Gynt Suite No. 1 (Grieg). Selection from "André Chénier" (Giordano). Kleine Abendmusik (Grabner). Two Piedmontese Dances, Op. 31 (Sinigaglia). Polka and Fugue from "Schwanda the Piper" (Weinberger).
8.0—Joseph Haydn Memorial Programme. The Leipzig Symphony Orchestra conducted by Theodor Blumer and the Genzel Quartet, with Literary Interludes by Dr. Erich Fortner. Selection from the Symphony in D Flat—the "London" Symphony. Literary Interlude: Haydn's Childhood and Youth. Largo from the String Quartet Op. 76 No. 5. Literary Interlude: His Early Struggle. Minuet from the String Quartet Op. 64 No. 5. Literary Interlude: At the Palace of Prince Esterhazy I. Finale from the Sonata No. 17. Literary Interlude: At the Palace of Prince Esterhazy II. Last Movement from the Military Symphony. Literary Interlude: England. Minuet from the Oxford Symphony. Literary Interlude: Later Years. Selection from "The Creation." Literary Interlude: Last Days. Variations from the Emperor Quartet. 9.30—News Bulletin followed by Silent Night.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.
11.15 *a.m.*—Light Music on Gramophone Records. 11.45—News Bulletin. 12 *noon*—Time Signal and Light Music on Gramophone Records.
4.30 *p.m.*—Orchestral Concert. 5.30—Agricultural Talk. 6.0—Italian Lesson. 6.30—Serbo-Croatian Lesson. 7.0—Educational Talk. 7.30—Pianoforte Recital. 8.15—Dance Music with Vocal Refrains. 8.45—Quintet Concert. 9.30—Time and News Bulletin.

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.
10.45 *a.m.*—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—See *Warsaw*.
2.0 *p.m.*—A Gramophone Record. 2.5—See *Warsaw*. 2.15—Aviation Report. 2.25—See *Warsaw*. 3.40—Light Music on Gramophone Records and Topical Talk. 4.10—Talk from *Cracow*. 959 kc/s; (312.8 m.) 4.35—See *Warsaw*. 5.50—Miscellaneous Items.
6.15—See *Warsaw*. 9.30—Humorous Dramatic Programme. 10.0—Dance Music relayed from the Bagatela Variety Theatre. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW.
8.0 *a.m.*—Review of the Paris Morning Press, relayed from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 10.0—Orchestral Concert.
1.0 *p.m.*—Programme for Women. 1.30—Concert by the Station Orchestra. 4.0—Programme for Children. 5.0—Instrumental Concert. 7.0—Orchestral Concert. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Vocal Concert, relayed from the Monte Carlo Theatre.

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.
8.0—9.0 *a.m.*—Topical Review. 11.45 Astronomical Notes and Culinary Report. 12 *noon*.—Chimes, Announcements, Labour Market Report and Amusement Guide. 12.15 *p.m.* Time Signal and Interval.
2.0—Chimes, Time and News Bulletin, followed by *Concert by the Station Sextet*. Overture, "Lorelei" (Wallace). Selection from "Jugar con Fuego" (Barbieri). Selection from "Madame Butterfly" (Puccini). Leyenda Valaca (Braga). Moment Musical (Pacheco) Suite, Sketches from Provence (Popy).
3.20—News and Radio Journal. 3.30—Interval. 7.0—Chimes, Exchange Quotations and Market Prices, followed by Request Concert of Gramophone Records. 8.15—Announcements and Parliamentary Report. 8.30—Interval. 9.0—French Lesson on Linguaphone Records. 9.30—Chimes, Time Signal, Radio Journal and Song Recital on Gramophone Records.
10.15—Orchestral Concert from the National Hotel, conducted by M. Marquina. 12 *midnight*—Chimes and Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*.

MUNICH (Germany)

563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.) and *Nürnberg*, 1,256 kc/s (239 m.).
Transmits at intervals from 5.45 a.m.
6.15 *p.m.*—Orchestral Concert.
7.10—Orchestral Concert relayed from Ludwigshafen. Soloist: Emmy Bettendorf (Soprano). Overture The Hebrides (Mendelssohn). Song from "Der Freischütz (Weber). Symphony in B Minor (the Unfinished) (Schubert). Songs (Wagner) from (*a*) "Lohengrin," (*b*) "Tannhäuser." Prelude and Death of Isolde from "Tristan und Isolde" (Wagner).
9.0—Talk. 9.20—Time and News.

OSLO (Norway)

Kringkastingselskapet, 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.); *Porsgrund*, 662 kc/s (453.2 m.) and *Rjukan*, 671 kc/s (447.1 m.).
9.30 *a.m.*—Swedish Lesson. 10.35—English Lesson.
4.0 *p.m.*—*Concert by the Station Orchestra*. Overture, "Pique Dame" (Suppé). Potpourri of the Works of Godard (Urbach). Pensée Elégiaque (Ancel). Jota, Navarra (Sarasate). Serenade (Reidarson). Chant plaintive (Sigurd Lie). Air and Dance of the Elves (Sigurd Lie). Hofballtänze (Lanner). Radetzky March (Strauss).
5.0—German Lesson. 5.30—Divine Service. 6.0—Announcements, Weather and News Bulletin. 6.30—Sonata for Violin and Pianoforte (David Monrad Johansen) by Henri Marteau (Violin) and Madame Olga Pommerenk-Brunn (Pianoforte). 7.0—Time Signal. 7.1—Agricultural Talk.
7.30—Choral and Organ Recital. Relayed from the Cathedral, *Trondheim*, 608 kc/s (493.4 m.)
8.40—Weather and News Bulletin.
9.0—Topical Talk. 9.15—Talk (to be announced). 9.45—Relay of Foreign Stations. 11.0 (approx.)—Close Down.

PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW. Transmits at intervals from 11.45 a.m
4.30 *p.m.*—Light Music on Gramophone Records. 5.0—Programme for Children. 5.30—7.0—Interval. 7.0—Agricultural Report and Giornale Radio. 7.20—Popular Music on Gramophone Records. 7.45—Time Signal and Announcements.
8.0—Opera (to be announced), relayed from the Massimo Vittorio Emanuele Theatre. In the interval, Cinema Notes. 9.55—News Bulletin.

PARIS (France)

Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW.
5.45 *p.m.*—Le Journal Parlé. 7.20—Weather Forecast.
7.30—*Gramophone Concert*. First Two Movements from the Second Symphony in D Major (Brahms). Aria from "Hérodiade" (Massenet). Aria from "La Traviata" (Verdi). Suite, Kinderszenen (Blech). Selection of Waltzes from "Der Rosenkavalier" (Richard Strauss). Overture, "La Fille de Madame Angot" (Lecocq). Ballet égyptien (Luigini). Waltzes from "The Dollar Princess" and "Die geschiedene Frau" (Fall). Two Airs from "Coup de roulis" (Messager). Waltz, The Cuckoo (Jonasson). Stephanie Gavotte (Czibulka). Hearts and Flowers (Czibulka). Polka (Strauss).

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.
12 *noon*—Gramophone Records, News and Announcements. 12.15—Variety Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Popular Music on Gramophone Records, Talks and News. 7.30—Variety Music on Gramophone Records. 8.30—Gramophone Records, Talks and News.
8.45—*Vocal and Instrumental Concert*. Overture, "Cosi fan tutte" (Mozart). Scherzo from the Septet (Beethoven). Minuet and Finale from the Military Symphony (Haydn). Nocturne and Intermezzo from "A Midsummer Night's Dream" (Mendelssohn). Divertissement (Lalo). Nocturne (Chopin-Glazounoff). Gavotte (Boëllmann). Trot de Cavalerie (Rubinstein). Hungarian March (Liszt).
10.45—News Bulletin. 10.50 (approx.)—Close Down.

PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.
6.45 *a.m.*—Physical Culture Lesson. 7.30—Weather and Physical Culture (contd). 7.45—Popular Music on Gramophone Records. 8.0—News, Weather and Press Review. 12 *noon*—Protestant Address by the Reverend René Ritz.
12.30 *p.m.*—Gramophone Concert for Young People. Potpourri of

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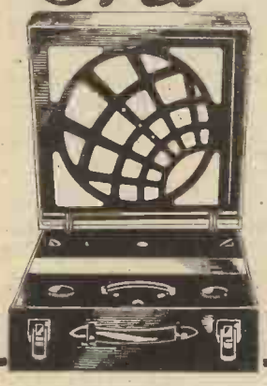

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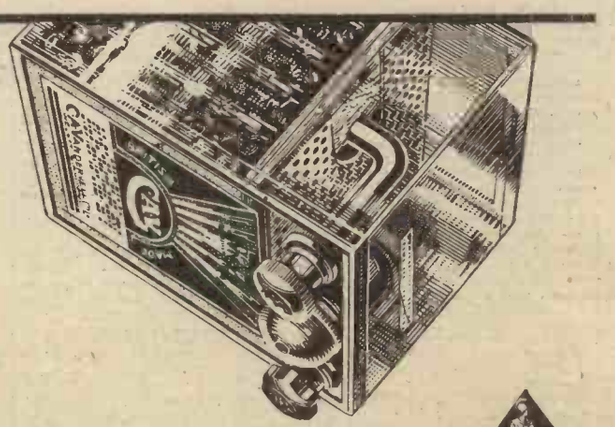

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Old French Songs, by Jack Hylton and his Band : (*a*) Auprès de ma blonde, (*b*) Le temps des cerises, (*c*) Au clair de la lune, (*d*) Ma Normandie, (*e*) Marche lorraine. Animal Sketches : (*a*) Harpsichord Solo : The Cuckoo (Daquin), (*b*) Harp Solo : The Swallow, (*c*) 'Cello Solo : Le Cygne (Saint-Saëns), (*d*) Violin Solo : The Bee (Schubert), (*e*) Villanelle des petits canards (Chabrier). (*f*) The Wolf and the Dog (La Fontaine). Two Stories (Perrault). Music by Zimmermann and Groffe : (*a*) Puss in Boots, (*b*) Blue Beard. La Bourrée Populaire d'Auvergne (Bouscatel). Quand le Merle Chante au Pré (Caylan and Canteloube). La Tour Eiffel s.v.p. (Bach and Laverne). Le Francais tel qu'on le parle by Nina Myral and Henri Laverne. Song : La Margot (Harpet). In the intervals at 1.0—Exchange News, and Weather, and at 1.30 and 2.0—Exchange.
3.45—Exchange and Market Prices. 6.30—Market Prices, Weather, Agricultural Report and Racing Results. 7.0—Literary Talk by Louis Barthou : Edmond Rostand.
7.30—*Gramophone Concert*. Bolero and Fandanguillo. Two Popular Russian Songs (Gretchaninoff) by the Kedroff Quartet. March, Le Clocher de St. Just (Arona).
7.45—German Press Review, Commercial Prices and News. 8.0—Programme arranged by the Palais de la Nouveauté. 8.30—News, Sports Notes, and Weather. 8.40—Review by Dominique Bonnaud. 8.45—Popular Music on Gramophone Records.
9.0—"The Retreat"—Play (Bayerlein), translated by Maurice Remon and Valentin, relayed from the Théâtre de l'Ambigu. In the interval, Press Review and News.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW; *Lausanne*, 442 kc/s (680 m.); and *Geneva*, 395 kc/s (760 m.).
Transmits at intervals from 11.30 a.m.
6.1 *p.m.* (from *Geneva*)—Light Music on Gramophone Records. 6.10 (from *Geneva*)—Esperanto Lesson. 6.30—*English Lesson*. 6.55—Announcements. 7.0 (from *Lausanne*)—Religious Talk.
7.30 (from Lausanne)—Concert by the Station Orchestra In the interval at 8.15 (approx.)—Weather and News. 9.30 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW.
Transmits at intervals from 10.0 a.m.
5.30 *p.m.*—*English Lesson*. 6.0.—Weather Report.
6.5—Viktoria and her Hussar—Operetta in Three Acts (Abraham). 8.30—Gramophone Records of Popular Music. 9.30—April Concert. 10.0 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (1RO). 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.), and 2RO, 3,750 kc/s (80 m.).
7.15—7.30 *a.m.*—Giornale Radio and Announcements. 11.0—Gramophone Records of Light Music. In the intervals at 11.35—Weather Report, at 12.15 *p.m.*—Giornale Radio and Exchange, and at 12.30—Time and News. 1.0—4.0—No Transmission.
4.0—Exchange Quotations. 4.5—Programme for Children. 4.25—Giornale Radio and Announcements.
4.30—*Soprano Song Recital by Margherita Cossa*. Meditation (H. Wolf). Aria from "Cinq Mars" (Gounod). Song from "Tannhäuser" (Wagner).
4.45—*Concert*. Overture, "The Crown Diamonds" (Auber). Canzone d'amore (Leoncavallo). Hindu Song (Rimsky-Korsakoff-Kreisler). Fantasia (Spialek).
5.15—Giornale dell'Enit. 5.20—Talk : Rome in the Time of Pius IX.
5.55 (from *Naples*)—Shipping News. 6.0 Agricultural Notes, Weather, Announcements, Giornale Radio and Press Review. 7.0—Time and Announcements. 7.2—Gramophone Records of Light Music. 7.30—Talk for Housewives, Sport Notes and Announcements.
7.45—Beethoven Concert. Orchestra conducted by Santarelli. Soloist : Arrigo Serato (Violin) Leonore Overture, No. 3. Romance in F Major for Violin and Orchestra. Film Notes. Adagio and Scherzo from the Ninth Symphony in D Minor, Op. 123. Concerto in D Major for Violin and Orchestra. In the interval at 8.45—"The Victim"—One-Act Play (Zambaldi). 9.55.—News.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.).
Transmits at intervals from 11.45 a.m.
9.0 *p.m.*—Musical Comedy Hits from *New York*. 9.30—Stock Reports and Police Notices. 9.45—Musical Ad Men. 9.55—News Bulletin. 10.15—"Skippy," from *New York*. 10.30—Musical Programme from *New York*. 10.45—Russ Columbo and his Orchestra, from *New York*. 11.0—Joe and Eddie. 11.15—Annette McCullough (Crooner). 11.25—Legislative Review. 11.29—Time Signal. 11.30—Golden Trail with Richfield. 11.45—Musical Programme from *New York*. 12 *midnight* (WGY only)—Vermont Lumber Jacks. 12 *midnight* (W2XAF only)—Stock Reports and News Bulletin.
12.15—4.0 *a.m.* (*Friday*)—*New York* Relay. 12.15—Campbell's Orchestra. 12.30—Prince Albert Quarter Hour. 12.45—Trials of the Goldbergs. 1.0—Fleischman Hour. 2.0—Big Six of the Air. 2.30—Adventures of Sherlock Holmes.
3.0—Lucky Strike Dance Hour. 4.0—Jerry Brannon (Baritone). 4.15—Floyd Walter (Organist), from the Ritz Theatre, *Albany*. 4.45—Cotton Club Orchestra from *New York*. 5.0—Jack Miles and his DeWitt Clinton Orchestra. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BEROMÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).
11.28 *a.m.*—Time Signal from the Neuchâtel Observatory. 11.30—Weather and News. 11.40—Concert by the Station Orchestra.
12.35 *p.m.*—Weather and Exchange Quotations. 12.45—2.30—Interval.
2.30—Programme of Marches and Waltzes by the Station Orchestra.
3.0—Concert of Light Music by the Station Quartet. 4.0 (from *Basle*)—Book Review. 4.30—Weather Report.
4.35—5.30—Interval.
5.30—Jazz on the Pianoforte, by Raie da Costa, on Gramophone Records. 6.0 (from *Zürich*). Talk : Modern Traffic Problems. 6.28—Time Signal and Weather. 6.30 (from *Zürich*)—Talk : Education at Home or at Schools ?
7.0 (from Basle)—Haydn Programme, in Commemoration of the Bi-Centenary of his Birth. Concert by the Station Orchestra. Soloists : Josef Cron (Tenor) and Eduard Henneberger (Pianoforte). Introductory Talk by Dr. Ehinger.
8.25—Concert of Light Music by the Station Orchestra. 9.0—Weather, News and Traffic Report. 9.15 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by *Boden*, 244 kc/s (1,229.5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Ostersund*, 389 kc/s (770 m.); and *Sundsvall*, 554 kc/s (542 m.).
Transmits at intervals from 6.20 a.m.
4.0 *p.m.*—Divine Service. 4.30—Programme for Children. 5.0—Variety Music on Gramophone Records. 6.45—Elementary German Lesson, relayed from *Göteborg*. 6.15 Weather and News. 6.30—Talk on Foreign Politics.
6.50—*Light Music*. Polonaise (Berg). Little Dance (Wesslander). Waltz and Foxtrot (Bratt). Intermezzo (Körling). Berceuse (Lundberg). Waltz (Ekström). Tango, Amabella (Hylbom). Potpourri (Ahlberg). Södermann Potpourri (Rudolf).
7.45—Talk. **8.15—Sonata in G Minor (Debussy), by Karl Achatz (Flute). Sven Blomquist (Violin) and Pierre Jamet (Harp). 8.45—Weather and News.**
9.0—Karlfeldt Programme. Reading and Choral Concert, conducted by Gabriel Graner. Poems by Erik Axel Karlfeldt set to Music. Reading of Poems by Karlfeldt. Poems by Karlfeldt set to Music.
10.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.
11.30 *a.m.*—*Gramophone Concert*. Selection from "Il Trovatore" (Verdi). Selection from "The Damnation of Faust" (Berlioz). Selection from "Samson and Delilah" (Saint-Saëns). Selection from "La Tosca" (Puccini). Aria from "Lakmé" (Delibes). Aria from the First Act of "La Traviata" (Verdi). Good-bye (Tosti). Les vieilles chansons (Nadaud). Robes et Manteaux (Zamacois). Duet from "La Mascotte" (Audran). Romance from "Les Mousquetaires au Couvent" (Varney). The Thirteenth Mazurka (Chopin). Humoresque (Dvorak). Spanish Serenade (Chaminade-Kreisler). Etude de Concert (Marcel Tournier). The Skaters (Waldteufel). Melody, Tes Yeux Noirs. Song and Czardas (Philippe Bathet).
12.45 *p.m.*—News in French and German. 1.0—Time Signal.
1.2—*Gramophone Concert*. March from "Tannhäuser" (Wagner). Selection (Koennemann). Selection from "The Mikado" (Sullivan). Selection from "The Merry Widow" (Lehár). Invitation to the Waltz (Weber). Waltz from "Faust" (Gounod). Dreams of Hawaii (Mittmann). Vindobona (Leopold). Overture, "La dame blanche" (Boieldieu). Waltz, The Blue Danube (Strauss). Romance (Glinka). Prayer (Minkovsky).
2.0—Programme for Children. 3.0—4.0—Interval.
4.0—*Gramophone Concert*. The Whistler and his Dog (Pryor). Way down South (Myddleton). Good-bye (Meskill). C'est une triste ville (Tobias). That is Love (James). J't'aime à ma façon (Scholl). One Love (Koehler). Baby's Birthday (Ronell). Play your Mandoline (Caesar). Selection (Davis). Celos del Indio (Avila). Sandino (Orosco). Egyptian Allah (Doyle). 4.45—Talk in French.
5.0—*Dance Music*. One Step, Voilà le printemps (Marceau-Pellemeulle), Foxtrot (Stones). Slow Foxtrot, Just a Night for Meditation (Young, Pollack and Pearly). My Rose of Bengal (Demarat). Waltz, Possession (Sieulle). Foxtrot, I'm marching home to you (Silver, Sherman and Lewis). Foxtrot, O Sarah ! (Demaret). Tango, Auroras de Montparnasse (Suelta). Foxtrot, Sunshine and Shadows (Stamper). Foxtrot, We all go oo-ha-ha together (Harrington, Moor and Wallace). Tango, Loin de toi (Rosen). Waltz, Ever or Never (Waldteufel). Foxtrot, That's my desire (Loveday). Foxtrot, Any time's the time to fall in love (Janis-King). Tango, Women and Roses (Grotte). Foxtrot, L'amour chante (Bousquet). Foxtrot, Connaissez-vous mon rythme (Jurmann). 6.0—Talk in French : The causes of the French Revolution. 6.15—Talk in French : The Colonial Exhibition
6.30—*Orchestral Concert* conducted by Maurice de Villers. Overture, "Ruslan and Ludmilla" (Glinka). Selection from "Hansel and Gretel" (Humperdinck). Trianon-Suite (Lachaume). Träume (Wagner). Albumblatt (Wagner). Le pas des fleurs, from Naila (Delibes). Suite of Dances (Pierné).
7.30—Time Signal. 7.32—News in French and German.
7.45—*Orchestral Concert* conducted by Maurice de Villers. March, Les Méharis (Vivian). Waltz, Morgenblätter (Johann Strauss). Overture, "La dame blanche" (Suppé). Song, Fermons nos rideaux (Paul Delmet). Poem, Le bout de la table (Jacques Normand). Selection from "La belle Hélène" (Offenbach). De fil en aiguille (Gillet). A bâtons rompus (Gillet). March, Sandy Hook (Benoit).
8.30 Concert relayed from Mulhouse. Overture, "La Fille de Madame Angot" (Lecocq). Waltz from "Gipsy Love" (Lehár). Selection from "The Czardas Princess" (Kálmán). The First Arabesque (Debussy). Waltz, Moonlight on the Alster (Fetrás). The Love Letter (Stewart). Selection from "Carmen" (Bizet). Selection from "Le roi d'Ys" (Lalo). Adagio and Allegro (Boccherini). Selection from "Rigoletto" (Verdi). Waltz, Très jolie (Waldteufel). Selections from "Werther" (Massenet). 10.30 (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiburg*, 527 kc/s (570 m.).
Transmits at intervals from 5.15 a.m. (*Frankfurt* Relay).
10.0 *a.m.*—News Bulletin and Time Signal. 10.15—Sponsored Concert. 10.45—Weather and Snow Report.

THURSDAY
continued

11.0 a.m.—Haydn Festival from Vienna.
12.15 *p.m.*—Time, News, Programme Announcements and Weather followed by Gramophone Records of Variety Music. 1.30—Elementary Spanish Lesson. 2.0—*Elementary English Lesson*. 2.30—See *Frankfurt*. 3.30—Talk : A Visit to an African Oasis.
4.0—Concert relayed from the Kurhaus, *Wiesbaden* (See *Frankfurt*). 5.30—Time and Weather. 5.40—Talk on Molière. 6.5—See *Frankfurt*.
6.30—Time and Agricultural Notes.
6.45—"Old Vienna"—a Variety Programme in connection with the Haydn Celebrations.
8.0—Haydn Concert by the Stuttgart Philharmonic Orchestra.
9.20—Time, News, Weather and Programme Announcements.
9.35 (from *Freiburg*)—*Concert of Viennese Schrammel Music* by the Original Viennese Schrammel Quartet. March, Freie Bahn dem Tüchtigen (Blankenburg). Waltz from "Rund um die Liebe" (Oscar Straus). Potpourri, "The Bird Fancier" (Zeller). Waltz from "Lilac Time" (Schubert-Berté). Marching Song, Wenn ich ein kleiner Leutnant war' und du mein kleines Mädchen (Stolz). March Foxtrot, Das ist der Tambour. March, Aller Ehren ist Oesterreich voll (Novotny). 10.30 (approx.)—Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.
7.15—11.30 *a.m.*—See *Turin*.
11.30—*Gramophone Records*. Selection from "The Barber of Seville" (Rossini). Mattinata (Leoncavallo). Piccoli derelitti (Leonardi).
11.45—See *Turin*.
12 *noon*—*Quintet Concert*. Coralina (Gramantteri). Etincelles (Waldteufel). Miette (Culotta). Selection, Le canzoni d'Italia (de Micheli). Paggio Fernando (Cabella). Serenade (Berti). L'isola della Rumba (Barzizza).
1.0—3.55 *p.m.*—See *Turin*.
3.55—*Concert*. Soloist : Virginia Perisi (Pianoforte). Overture, "Tancred" (Rossini). Extase (Ganne). Pianoforte Solos : (*a*) Rigaudon from "Dardanus" (Rameau), (*b*) Minuet (Rutini). Selection from "Mignon" (Thomas). Pianoforte Solos : (*a*) Chanson triste (Tchaikovsky), (*b*) Nocturne (Chopin). Voga e canta (Sciarra). Selection (Strauss). Fior di Manilla (Innocenzi).
4.50—6.5—See *Turin*.
6.5—*Quintet Concert*. Overture, "Lysistrata" (Lincke). Torna nel sogno (Sagaria). Bramosia (Militello). Myosotis blue (Moleti). Selection from "Sybill" (Jacobi). El serpentario (Cortopassi). Miss K. P. P. (Ferraris).
7.0 till Close Down—See *Turin*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.6 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.); and *Genoa*, 959 kc/s (312.8 m.).
7.15 *a.m.*—Giornale Radio. 7.30—Food Market Prices.
10.15—*Variety Concert*. Overture, Thermidor (Scassola). Quand l'amour meurt (Crémieux). Invitation to the Dance (Weber). Selection from "Il Trovatore" (Verdi). Selection (Komzak). Selection from "Die Puppenfee" (Bayer). Fior d'Andalusia (Pennati-Malvezzi). Selection from "Countess Maritza" (Kálmán).
11.30—Gramophone Records of Variety Music. 11.45—Giornale Radio. 12 *noon*—Time and Announcements. 12.2 *p.m.*—Dance Music from the Savoia. 12.45—Exchange Quotations. 1.0—Gramophone Records of Variety Music.
1.30—3.15—Interval.
3.15—Giornale Radio. 3.30—Programme for Children. 3.45—Gramophone Records of Variety Music. 3.55—Dance Music from the Garden Club. 4.50—Giornale Radio.
5.45—Agricultural Notes. 6.0—Announcements.
6.5—*Musical Selections*. Overture, "Mignon" (Thomas). Selection from "A Night in Venice" (Johann Strauss). 6.30—Time and Announcements. 6.32 (*Milan* only)—*Musical Selections* (contd.) Solemnita nella notte (Lattuade). Selection (Lehár). 6.32 (*Turin* and *Genoa*)—Gramophone Records of Variety Music. 7.0—Giornale Radio, Weather, and Gramophone Records of Variety Music. 7.30—Talk for Housewives. 7.35—Selections for Plucked String Orchestra.
8.0—Transmission of an Opera. In the intervals : Cinema Notes, Talk and Giornale Radio. News after the Programme.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.); *Innsbruck* 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.); and *Salzburg*, 1,373 kc/s (218 m.).
Transmits at intervals from 8.20 a.m.
11.0 a.m.—Haydn Memorial Programme, relayed from the Musikvereinssaal. Addresses by Wilhelm Milkas and Dr. Emmerich Czermak. The Choral Society of the "Gesellschaft der Musikfreunde" and the Vienna Philharmonic Orchestra, conducted by Clemens Krauss. Variations on the National Anthem. Te Deum.
12.15 *p.m.*—Time, Weather and News.
12.25—1.0—Gramophone Concert : Famous Composers conducting their own Works. 2.0—Time, Weather and Market Prices. 2.20—Talk for Housewives.
2.30—Sonata in F Minor, Op. 57 (Beethoven), by Louise Wandel (Pianoforte). 2.50—Reading of Fairy Tales. 3.15—Talk in French. 3.40—Talk : The Programme of School Broadcasts for April. 4.0—Carl Prohaska Programme on the Fifth Anniversary of his Death. 5.15—Talk for Women. 5.40—Talk arranged by the Chamber of Commerce.
6.0—American Transmission for Austria, relayed from Washington.
6.30—Time and News.
6.40—"*Faust*"—from Marlowe to Lenau. 7.50—Concert of Styrian and Viennese Music, arranged by Edmund Skurawy. In the interval at 8.40—Weather and News. 9.35—Dance Music by the Georges Boulanger Orchestra, relayed from the Café Westminster.

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.
10.20 *a.m.*—Aviation Weather Report. 10.25—Interval. 10.45—Press Review. 10.58—Time Signal and Bugle Call from St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Weather Report. 11.15—Agricultural Talk. 11.35—Light Music on Gramophone Records. 1.0 *p.m.*—1.45—Interval.
1.45—Light Music on Gramophone Records. 2.5—Economic Report and Exchange Quotations. 2.15—A Report. 2.20—Interval. 2.25—Historical Talk. 2.45—Hydrographic Report. 2.50—Programme for Children. 3.15—Interval. 3.20—Elementary French Lesson. 3.40—Concert by Young Soloists. 4.10—Talk : The Sayings of Mickiewicz, relayed from *Cracow*, 959 kc/s (312.8 m.).
4.35—*Concert of Light Music*. Mme. Barmas (Violin), Mme. Robovska (Pianoforte) and Eug. Narozny (Baritone), accompanied by Louis Urstein. Pianoforte Solo : Sonata in F Major, Op. 10, No. 2 (Beethoven). Baritone Solos : (*a*) Aria from "Faust" (Gounod), (*b*) Aria from "Verbum nobile" (Moniuszko). Pianoforte Solos : (*a*) Arietta (Leo), (*b*) Old Minuet (Sgambati), (*c*) Two Selections from the Suite "Marionettes" (Poldini), (*d*) Two Selections (Moszkovsky) : Etude in A Flat Major and Tarantella. Baritone Solos : (*a*) Two Songs (Karlowicz), (*b*) Si j'étais plus jeune (Gall), (*c*) The Dream (Tosti). Violin Solos : (*a*) Chaconne (Vitali), (*b*) Hebrew Melody (Barmas), (*c*) Gavotte and Musette (Barmas), (*d*) Humoresque (Dvorak), (*e*) Mazurka à la Chopin (Tchaikovsky-Barmas).
5.50—Miscellaneous Items. 6.15—Agricultural Correspondence.
6.25—Programme Announcements.
6.30—Sports Notes. 6.35—Light Music on Gramophone Records.
6.45—Radio Journal. 7.0—Talk : The Name and the Man.
7.15—*Concert of Light Music by the Station Orchestra*, conducted by S. Nawrot. Soloist : M. Janovsky (Tenor), accompanied by Louis Urstein. Overture, "Im Reiche des Indra" (Lincke). Tenor and Orchestra : (*a*) Potpourri, Fortissimo (Kalman), (*b*) Serenade, Carmencita (Magnfred), (*c*) The Stars (Gall). Malaguena (Moszkovsky). Tenor Solos : (*a*) Air from "The Land of Smiles" (Lehár), (*b*) Air from "Frederica" (Lehár), (*c*) Air from "The Flower of Hawaii" (Abraham). Waltz, Ravissante (Waldteufel). Tango from "The Czarevitch" (Lehár) March (Stelzig).
8.35—"The Violin-Maker of Cremona" (Coppee) (arranged for the Microphone by Dunin-Karwicki).
9.20—Radio Journal. 9.25—Weather and Police Notes. 9.30—Dance Music

FRIDAY (April 1)

PRINCIPAL EVENTS

SACRED MUSIC
7.0 p.m. Copenhagen: Requiem (Verdi).

SYMPHONY CONCERTS
7.0 p.m. Stockholm: Haydn programme.
7.5 „ Stuttgart, Frankfurt: The Stuttgart Philharmonic Orchestra.
7.15 „ Warsaw: The Philharmonic Orchestra.
7.40 „ Huizen: Haydn programme.
8.0 „ Radio-Paris: Haydn programme.
8.10 „ Hilversum: Haydn programme.

CONCERTS (Vocal and Instrumental)
6.5 p.m. Vienna: "The Seasons" (Haydn)
6.30 „ Hamburg: Rossini programme.
6.40 „ Budapest: "The Creation" (Haydn). The Philharmonic Society, conducted by Dohnányi.
8.0 „ Brussels No. 2: Station Symphony Orchestra.

OPERA AND OPERETTA
7.45 p.m. Rome: "Il paese dei Campanelli" (operetta).

CHAMBER MUSIC
2.40 p.m. Huizen.
6.20 „ Heilsberg: The Ninke Trio. Trio, Op. 99 (Schubert).
8.30 „ Strasbourg.

RECITAL
7.30 p.m. Schweizerischer Landessender; Juan Manén (Violin).

PLAYS AND TALKS
7.15 p.m. Hamburg: "Götz von Berlichingen" (Goethe).
8.10 „ Berlin, Heilsberg: "Das bleiche Sterben" (Radio Play by Gregor Jarcho).
8.20 „ Munich: "For Listeners in a Hurry" (A Day's Programme), relayed from Nürnberg.

MISCELLANEOUS
7.0 p.m. Munich: Haydn Commemoration.

DANCE MUSIC
9.20 p.m. Copenhagen (till 11.30): Otto Lington's Band.

Mahler's *Songs of a Wayfaring Lad*

Mahler was only twenty-three when he wrote these songs, words and music, but had already begun that steady ascent from post to post in the conducting world which did not cease until he reached the goal of his ambition as principal Conductor and Artistic Director in Vienna. The songs have much in common with the spirit of the great collection "Des Knaben Wunderhorn," from which he afterwards chose a number of poems to set to music, but the similarity of the first one in this cycle to one of them is probably largely accidental. From his earliest years he had been familiar with countless folk songs of his own country, and their idiom was his own natural mode of expression. The *Wayfaring Lad* is an unlucky lover, and in the first song he tells of the grief that will be his on the day when his sweetheart marries another. The second song recounts the happiness of which the world is full, though none may ever come to him. The third tells how all things remind him of her eyes, her golden tresses, her silvery laughter, and at the last in the fourth, he finds rest beneath the branches of a tree by the wayside. The songs are to be broadcast from WARSAW station this evening.

Haydn's Pious Task

The Creation has rightly been given a big share in the Concerts by which the whole world has been commemorating the second centenary of Haydn's birth. It deals in picturesque fashion with the Creation of the World, of the growth of herb and flower, and finally with the coming of Man. Haydn approached his task in a spirit of sincere humility. In his own words: 'Never was I so pious as when composing the *Creation*. I knelt down every day and prayed God to strengthen me." The text was originally compiled from Milton's "Paradise Lost," for Händel, but he had made no use of it, and Salomon gave the copy to Haydn.

Haydn's Birthplace, Rohrau (from which a Commemoration was broadcast by Vienna on Monday).

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 *a.m.*—The Daily Service.
10.30—Time Signal (Greenwich) Shipping Forecast.
10.45–11.0—"The Past Weeks in Westminster."
12 *noon*—Emanuel Starkey and his Orchestra.
12.45—An Organ Recital by Herbert Dawson.
1.0—Time Signal (Greenwich).
1.30—2.30—A Recital of New Gramophone Records, by Christopher Stone.
4.0—Moschetto and his Orchestra, from the Dorchester Hotel.
4.45—Time Signal (Greenwich).
5.15 (Daventry)—The Children's Hour.
5.15 (London and Northern)—The B.B.C. Dance Orchestra, directed by Henry Hall.
6.0—"The First News."
6.30—Time Signal (Greenwich).
6.30—The Foundations of Music. Haydn Pianoforte Sonatas. Played by Frank Merrick.
6.50—"The Week-End in The Garden"—XII. Mr. C. H. Middleton.
7.5—Topical Talk.
7.30—"Modern Life and Modern Leisure"—XII. Dr. C. Delisle Burns, D.Litt.
8.0—A Musical Comedy Programme. Fay Caroll (Soprano); Brian Gaye (Baritone); The Revue Chorus. The B.B.C. Theatre Orchestra. Conductor, Leslie Woodgate.
9.0—Time Signal (Greenwich).
9.0—"The Second News."
9.15—Shipping Forecast: New York Stock Market Report.
9.20—"Here and Now": Mr. Gerald Barry.
9.35—"To any Husband." Adapted by Anne Parlane from the short Story, "A Wildgoose Chase," by A. E. Coppard. The Play produced by Peter Creswell.
10.15—The Victor Olof Sextet.
11.0–12 *midnight*—Dance Music. The Savoy Hotel Orpheans, from the Savoy Hotel.
11.30—Time Signal (Greenwich).

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 *a.m.* (London and Northern)—The Daily Service.
10.30—11.0 (London and Northern)—Daventry National Programme.
11.30—12 *noon* (London—Experimental Television Transmission (Baird Process) (356.3 *m.* Vision; 261.3 m. Sound).
12 *noon*—Frank Newman at the Organ.
1.0 *p.m.*—The New Victoria Cinema Orchestra, Bradford.
2.0—3.0—The Northern Studio Orchestra, directed by John Bridge. George Firth (Baritone).
4.0 (London and Northern)—Daventry National Programme.
5.15—The Children's Hour.
6.0—"The First News."
6.30 (London and Northern)—The Carlton Mason Sextet. Dorothy D'Orsay (Contralto); Norman Stone (Tenor).
6.30 (Midland).—The Midland Studio Chorus, under the direction of Edgar Morgan.
7.0 (Midland)—A Recital of Gramophone Records.
7.45 (Midland)—The Regional Director's Monthly Talk: "Coming Events."
8.0 (London)—A Pianoforte Recital by Cyril Smith.
8.0 (Midland)—Dance Music. Billy Merrin and his Commanders.
8.0 (Northern)—A Ballad Concert. Millicent Webster (Pianoforte); Constance Felpts (Contralto); Roland Townend (Violoncello).
8.30 (London)—Mr. Charles Bosanquet: "American Cowboy Songs."
9.0 (London)—An Orchestral Concert. Norman Notley (Baritone); The B.B.C. Orchestra (Section E). Conducted by B. Walton O'Donnell.
9.0 (Midland)—"In Toyland." The Midland Studio Orchestra, directed by Frank Cantell. Harold Casey (Baritone).
9.0 (Northern)—The Studio Orchestra. Directed by Frank Bridge.
10.15—"The Second News."
10.35—11.10 (Midland).—as London.
10.35–12 *midnight* (London and Northern)—Dance Music.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s. (349 m.); 8 kW.
7.30—8.30 *a.m.*—Topical Review. 11.0—Chimes and Weather. 11.5—1.0 *p.m.*—Interval. 1.0—Health Talk, followed by Gramophone Records. 1.30—Concert of Spanish Music by the Station Sextet. 2.0—Theatre Notes, Film Review and Variety Music on Gramophone Records. 2.15—Talk: The Weekly Excursion in Catalonia, followed by Sextet Concert (contd.). 2.50—Labour Exchange Report. 3.0—Programme for Hospitals and Benevolent Institutions, with Gramophone Records. 4.0—7.0—Interval.
7.0—*Concert by the Station Trio.* Serenade, Invano (Amadei). Selection from "Sappho" (Massenet). Plaisir d'amour (Martini). Czardas, Ivanka (Michiels).
7.30—Exchange Quotations and Elementary French Lesson. 8.0—Programme for Women. 8.30—Request Gramophone Concert and Press Notes. 9.0—Chimes, Weather, Market Prices, and Relay of Foreign Stations.
9.30—*Concert by the Station Orchestra.* Marche des sans-filistes (Pischek). Selection from "Mefistofele" (Boito). Waltz, Dolores (Waldteufel). Miramar (Turina). Minuet (Leuschner). Gallop (Bizet).
10.0—Topical Talk by Ramon Portusach. 10.15—Concert by the Vilalta Orchestra, relayed from the Café Español. 12 *midnight* (approx.).—Close Down.

BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW. Transmits at intervals from 10.0 a.m.
4.0 *p.m.*—*Concert by the Station Orchestra.* March (Brodil). Overture (Krstic). Selection from "Paganini" (Lehár). Gipsy Suite (Coleridge-Taylor). Waltz, Dir Allein (Waldteufel).
5.0—Czech Lesson. 5.30—Sokol Talk. 6.5—Relay from *Vienna.* In the interval at 9.0 (approx.)—News and Sports Notes.

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 75 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert).
3.30 *p.m.*—Concert from *Leipzig.* 4.30—Talk: Animal Life in the Antarctic. 5.0—Talk: America's Struggle against Deflation. 5.30—Talk: German for Germans. 5.55—Weather for Farmers. 6.0—Talk for Doctors. 6.30—Talk for Workers, followed by Weather for Farmers.
7.0—Talk by Kurt Sell: What People are talking about in America, relayed from *America.* 7.15—See *Berlin* (*Witzleben*). 9.30—News Bulletin.
9.45—Part Relay on Gramophone Records of the Silesian Demonstration of the National Society of Silesians from the "Cloú" Konzerthaus, with Addresses by Herr Jaenicke and Hans Kaergel. 9.55 (approx.)—see *Berlin* (*Witzleben*).

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert).
5.55 *p.m.*—"The Witzleben Station informs its Listeners . . ." 6.0—Topical Talk. 6.10—Orchestral Concert from the Traube Restaurant.
7.0—Talk by Kurt Sell: What People are talking about in America, relayed from *America.*
7.15—Extracts from "Rodelinda"—Opera in Three Acts (G. F. Händel).
8.0—"Das bleiche Sterben"—Radio Play (Jarcho). 9.30—Political Press Review. 9.50—Weather, News and Sports Notes. 9.55 (approx.)—Variety Programme.

BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW.
12 *noon*—Relay from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.).
12.45 *p.m.*—Popular Music on Gramophone Records. In the interval—News. 1.50—Exchange Quotations. 2.0—Trio Concert of Chamber Music and Descriptive Music. 6.0—Literary Talk, with Recitations. 7.30—News Bulletin. 7.40—Advanced Spanish Lesson. 7.55—Lottery Results. 8.0—News and Weather Forecast.
8.10—"La Tosca"—Opera in Three Acts (Puccini), relayed from the Grand Theatre. After the Programme—Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).
Transmits at intervals from 5.30 a.m.
3.25—*Orchestral Concert* of Light Music, conducted by Erich Susseli, with the Three Seiffert sisters on three Pianofortes, relayed from the Café Vaterland.
4.40—Agricultural Prices. 4.45—Review of New Books on Music. 5.0—Talk by Hermann Zucker. 5.30—Surprise Programme—That will interest you! 5.50—Talk: Contemporary Religious Instruction. 6.15—Weather for Farmers.
6.17—*Orchestral Concert*, conducted by Franz Marszalek. Selection from "Der Orloff" (Granichstaedten). Overture, "Die Landstreicher" (Ziehrer). Waltz, Die guten alten Zeiten (Josef Strauss). Adlon-Marsch (Heinecke).
6.55—Weather Forecast. 7.0—Talk by Kurt G. Sell: What People are Talking about in America, relayed from *America.*
7.15—See Berlin (Witzleben). 8.0—News Bulletin.
8.10—"*After April Everything will be better*"—An Optimistic Radio Play (Matz, music by Sczuka). 9.10—Time and News.
9.55—See *Berlin* (*Witzleben*). After the programme—Weekly Sound Film News from the Ufa Theatre. 1.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.
12.15—1.45 *p.m.*—Weather and *Gramophone Concert.* Overture, "Anacréon" (Cherubini). Variations on a Swiss Melody (Mohr). Selections (Frings): (*a*) Marquise, voici le printemps, (*b*) Helas, Le Printemps et l'amour, (*c*) Marquise si notre amour passe, (*d*) Chevalier, l'amour est un leurre. Pasodoble, Chéri es-tu d'Espagne. A Spanish Tango. Slow Foxtrot, Marlène. Pasodoble, Lady of Spain. Les Bœufs (Dupont). Le Noël des Gueux (Vargues), Selections (Heymann): (*a*) Waltz, I should always love you, (*b*) Foxtrot, It is only a Dream. Parade of the Matches (Welhe). Parade of the Tin Soldiers (Jessel). Musical Panorama (Lincke). Selec-

tion from "Die Kinokönigin" (Gilbert). Waltz, Mimosa (Jones). Waltz, Dynamiden (Johann Strauss).
5.0—*Orchestral Concert*, conducted by Mr. Meulemans. Ballet Music from (*a*) "Les Deux Pigeons" (Messager), (*b*) "Lakmé" (Delibes), (*c*) "The Bartered Bride" (Smetana). Ballet russe (Luigini). Bacchanale from "Samson and Delilah" (Saint-Saëns). Ballet Music from "Hérodiade" (Massenet).
6.0—*Gramophone Records*. Selections (Abraham): (*a*) Foxtrot, Le Tirelire (*b*) Slow Foxtrot, Ja vois la vie en rose. Selection from "Les Dragons de Villars" (Maillart). Selection from "The Daughter of the Regiment" (Donizetti). 6.15—Announcements.
6.30—*Gramophone Records*. Ballet Music from "Le Cid" (Massenet). Selections (Goublier): (*a*) La Voix des Chênes, (*b*) Le Credo du Paysan. Selections from "L'Arlésienne" (Bizet): (*a*) Prelude, (*b*) Minuet, (*c*) Adagietto, (*d*) Danse provençale, (*e*) Carillon. 7.30—Music Review.
8.0—*Orchestral Concert*, conducted by Mr. Kumps. Overture, "Le Roi l'a dit" (Delibes). Suite No. 2 from "L'Arlésienne" (Bizet). Invitation to the Waltz (Weber). Hindu Song (Rimsky-Korsakoff). Jota Aragonèse (Saint-Saëns). Marche lorraine (Ganne). 8.45—Talk.
9.0—*Concert* (*continued*). Selection from "Mignon" (Thomas). Bass Solo by Mr. Coppois: Song from "Tannhäuser" (Wagner). Suite pour mes petits amis (Pierné). Scènes Brabançonnes (Sarly). Bass Solo by Mr. Coppois: Song from "The Fair Maid of Perth" (Bizet). Ballet Music from "Les Erynnies" (Massenet). 10.0—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW.
Programme in Flemish.
12.15—1.45 *p.m.*—Weather Forecast and Popular Music on Gramophone Records. 5.0—Concert by the Station Orchestra. 6.0—Light Music on Gramophone Records. 6.15—Talk: The Influence of the Radio on Ordinary Language in England. 6.30—Concert of Classical Music on Gramophone Records. 7.15—E. W. Schmidt reads from his own Works. 7.30—Wireless Review.
8.0—Symphony Concert by the Station Orchestra. Joyeuse Marche (Chabrier). Selection from "Hansel and Gretel" (Humperdinck). Spanish Fantasia for Pianoforte (Liste). Hungarian Dances (Brahms). 8.30—"*The Triumph of Science*"—a Radio Sketch (Tristan Bernard). 9.0—*Concert* (*contd.*). Overture, "Piccolino" (Guiraud). Children's Corner (Debussy). Pianoforte Solos. La Forêt enchantée (Vincent d'Indy). Spanish Caprice (Rimsky-Korsakoff). 10.0—Le Journal Parlé.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.
11.0 *a.m.*—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 *noon*—Popular Music on Gramophone Records.
4.0 *p.m.*—Concert of Military Music. 5.0—News and Time Signal. 5.10—Concert (contd.). 6.0—Educational Talks on Philosophy and Religion. 6.40—Light Music on Gramophone Records. 7.0—Song Recital by G. Polesco (Bass). 7.30—Talk (to be announced). 7.45—Dramatic Programme. 8.15—Dance Music and Close Down.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW.
Programme also relayed on 210 m. from 5.30—11.0 p.m.
8.15 *a.m.*—Military Band Concert, conducted by Fricsay. 10.10—Tidal Report. 11.0—Chimes. 11.5—Programme of Russian Songs by the Eugen Stepat Balalaika Orchestra. 3.0 *p.m.*—Programme by Gustav Mitterspacher. 4.0—Recital of Hungarian Folk Songs, by Lenke Zsögön, accompanied by the Toll Cigány Band. 5.0—Programme by Béla Révész. 5.30—Dance Music on Gramophone Records.
6.40—"The Creation" Oratorio (Haydn), by the Philharmonic Society relayed from the Academy of Music. Conductor: *Ernst Dohnányi*. Soloists: Anna Bathy, Franz Székelyhidy, Oscar Kálmán, and the Palestrina Choir. 8.45—Time Signal, News and Announcements, followed by the Bernhardt Eté Jazz Band, relayed from the Hotel Royal.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.
See *Langenberg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).
6.30 *a.m.*—Morning Gymnastics. 7.30—Divine Service from the Cathedral. 10.0—Weather Forecast. 10.10—Angling Notes. 11.15—Programme for Schools: Talk in German. 11.45—12.15 *p.m.*—No Transmission. 12.15—12.45—Programme for Schools. Talk: A Journey to Spitzbergen. 2.10—Reading from the Works of Knud Hjortö.
2.30—Orchestral Concert from the Wivex Restaurant. 4.0—Programme for Children. 4.40—Exchange and Fish Market Prices. 4.50—Talk: Great Works of Danish Literature—Ambrosius Stub. 5.20—German Lesson for Beginners. 5.50—Weather Forecast. 6.0—News Bulletin. 6.15—Time Signal. 6.20—Review of Politics for the Month of March. 6.50—Introductory Talk to the following Transmission.
7.0—"Requiem" (Verdi), relayed from the Oddfellows' Hall. The Wireless Symphony Orchestra conducted by Egisto Tango. Viorica Tanto, Ingeborg Steffensen, José Riavez and Emanuel List (Vocalists). A Mixed Choir. 9.0—News Bulletin.
9.20—Dance Music from the Ritz Restaurant. In the interval at 11.0—Time and Chimes from the Town Hall. 11.30 (approx.)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).
1.30 *p.m.*—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records. 2.0—6.0—Interval. 6.0—Light Music on Gramophone Records. 6.15—Programme for Children. 7.0—Popular Music on Gramophone Records. 7.20—News Bulletin. 7.30—Time Signal. 7.31—Talk on Gardening.
7.45—Concert of Operatic Selections by the Station Sextet and Vocalists. 8.30—Surprise Programme. 10.30—Time Signal, News, Weather Forecast and Close Down.

FÉCAMP (France)

Radio Normandie. 1,364 kc/s (219.9 m.); 1 kW.
Transmits at intervals from 12 noon.
7.30 *p.m.*—Local News. 7.45—Announcements. 8.0—Agricultural Talk. 8.15—News Bulletin. 8.30 (from *Le Havre*)—Half an Hour for Listeners, followed by Concert. 12 *midnight*—Variety Programme. 1.0 *a.m.* (*Saturday*)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by *Cassel*, 1,220 kc/s (246 m.).
Transmits at intervals from 5.15 a.m.
11.0 *a.m.*—Time and Economic Notes. 11.5—Concert from *Berlin* (*Witzleben*). 11.40—News, Weather, and Programme Announcements. 11.55—Nauen Time Signal. 12 *noon*—Concert from *Langenberg*. 12.50 *p.m.*—News Bulletin. 1.0—Sponsored Gramophone Concert. 1.45—Weather Report. 2.5—Time and Economic Notes. 3.55—Economic Notes.
4.0 (from *Cassel*)—*Concert by the Philharmonic Orchestra*. Overture, "Fatinitza" (Suppé). Waltz, Am himmelblauen See (Millöcker). Selection from "Boccaccio" (Suppé). Juanita-Marsch (Suppé). Selection from "Der Feldprediger" (Millöcker). Puppenmädelwalzer (Fall). March, Hand in Hand (Blon). Overture, "Der kleine Prinz" (Müller). Selection from "Der Rastelbinder" (Lehár). Waltz, Mein Baden (Komzak). March, Brucker Lager (Karl).
5.30—Economic Notes. 5.40—See *Stuttgart*. 6.30—Time, Programme Announcements, Weather and Economic Notes. 6.35 till Close Down—See *Stuttgart*. In the interval at 9.50—News. 11.0 (approx.)—Close Down.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.); and *Kiel*, 1,292 kc/s (232.2 m.).
Transmits at intervals from 5.30 a.m. (Weather and Concert from *Hanover*).
11.30 *a.m.* (from *Kiel*)—*Quintet Concert* conducted by Hans Döring. Waltz, Autumn Dream (Cavallazzi). Romance, La Passion (Lamare). Selection from "The Last Waltz" (O. Straus). Serenata di baci (Micheli). Zug der Gnomen (Blon). Waltz, Immortellen (Gungl).
12.15 *p.m.*—Sponsored Programme. 1.0—Ice Report and News. 2.0—Weather Report. 2.5—Exchange Quotations. 2.35—Shipping News. 3.0—North German Programme for Children. 3.30—Talk for Women. 3.35—Talk: Women Emigrants. 4.0—Talk: Easter in the Czech Institute in Arnheim.
4.20 (from *Hanover*)—*Old North German Folk Songs—Concert by the Station Orchestra*. Soloists: Hermann Munk (Songs to the Lute) and G. F. Konrich (Recitations). Aus der Jugendzeit (Friedemann). Recitations (Schroder): (*a*) Dat Volksleed, (*b*) Schin uns de leve Sunne, (*c*) Van Gold dre Rosen. Beim Holderstrauch (Kirchner). Songs: (*a*) Folk Melody, Nachtwächterlied, (*b*) De Snider un de Rider (Rahlfs), (*c*) Folk Song, Nu lat't uns singen dat Abendleed. Es waren zwei Königskinder (Ailbout). Recitations: (*a*) De twee Königskinner, (*b*) Hennecke Knecht, (*c*) Abendleed. Das Grab auf der Heide (Heiser). Songs: (*a*) Verlaten (Jindelt-Rahlfs), (*b*) Folk Song, Lat't us singen un fröhlich sin, (*c*) Folk Song, Schlemmmerlied. In Röschof bin ich geboren (Hanoverian Folk Song). March, Gott segne Niedersachen (Krause).
5.35 (from *Kiel*)—Talk for Workers. 5.55—Educational Talk. 6.20—Frankfurt Exchange and Hamburg Egg Market Prices. 6.25—Weather Report.
6.30—Rossini Concert by the Station Orchestra, Erna Kroll-Lange, Gertrud Schnitzer, Herbert Ernst Groh and Bernhard Jakschtat. Overture, "The Italian Girl in Algiers." Selections from "The Barber of Seville." Aria from "William Tell." Duet from "Semiramis." Stabat Mater. Aria and Romance from "Semiramis."
7.0—See *Berlin* (*Königs Wusterhausen*).
7.15—"Götz von Berlichingen"—Play in Five Acts (Goethe) (arranged for Radio by Hans Bodenstedt), with Incidental Music by Horst Platen. 9.30—News Bulletin.
9.45 (from Hanover)—Instrumental Cabaret, *by the Hanoverian Norag Orchestra* conducted by Otto v. Sosen. Hirtenleben in den Alpen (Kling). Humorous String Quartets (Razek): (*a*) Der Schmetterling, (*b*) Morgens auf dem Hühnerhof. In a Clock Store (Orth). Waltz Aria for Clarinet (Schreiner). Humoresque, Kaffeeklatsch (Jessel). Ein Dreigespräch for Flute, Oboe and Clarinet (Hamm). Eulenspiegel-Marsch (Rupprecht). 10.20—Ice Report.

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).
Transmits at intervals from 5.30 a.m. (Gymnastics and Gramophone Concert).
11.0 *a.m.*—*Concert by the Little Orag Orchestra*, conducted by Eugen Wilcken. Overture, "Die Felsenmühle" (Reissiger). Suite, Sleeping Beauty (Tchaikovsky). Waltz, Accelerationen (Johann Strauss). Fantasia on the Works of Gounod (Urbach). Overture, "Ten Maids and No Man" (Suppé). Die lustigen Kobolde (Mausz). Zwiegespräch (Kellner). Waltz from "Zigeunerprimas" (Kálmán). Selection from "Die Postmeisterin" (Jessel).
2.45 *p.m.*—Programme for Children. 3.15—Talk for Women.
3.40 (from *Danzig*)—*Concert by the Tschertok Band*. Spanish March, Bolero (Hügel). Methusaleh Waltz (Johann Strauss). Minuet (Bolzoni). Modern Fantasia on Suppé Melodies: Suppé - Illusionen (Michacloff). Gavotte (Gillet). Song and Tango, Schöne Senora, kleine Senora (Brodzsky). March from "Die grosse Liebe" (Landauer).
4.45—Talk: The Winter Work of a Rowing Club. 5.15—Ice Report and Market Prices. 5.30 (from *Danzig*)—Talk: Mass Hysteria and the Industrial Crisis. 5.55—A Musical Diary by Dr. Kroll.
6.20—Trio in B Flat Major, Op. 99 (Schubert) by the Ninke Trio. 6.50—Weather Forecast. 7.0—Talk by Kurt Sell: What People are talking about in America, relayed from *America*.
7.15—*Wind Instrument Concert*, conducted by Ernst Stieberitz. March, El Capitan (Sousa). Overture, "Deutsche Burschenschaft" (Weidt). Blumenlied (Lange). Waltz, Unter Liebchens Fenster (Lincke). The Bell Serenade (Kockert). Potpourri, Johann Strauss, the Waltz King (Bohne). Two Army Marches.
8.0—Announcements followed by Programme from *Berlin* (*Witzleben*).

HILVERSUM (Holland)

1,004 kc/s (298.8 m.); 8.5 kW.
6.25—9.40 *a.m.*—Programme of the Workers' Radio Society (V.A.R.A.). 6.25—6.40 and 7.10—7.25—Gymnastics. 7.40—Gramophone Records of Variety Music.
9.40—Religious Programme by the Liberal Protestant Radio Society (V.P.R.O.)
9.55—11.40—Programme of the V.A.R.A. 9.55—Recitations. 10.10—Septet Concert. 10.40—Talk for Women Socialists. 10.55—Concert (contd.) with Gramophone Records of Variety Music.
11.40 *a.m.*—3.40 *p.m.*—Programme of the Algemeene Vereeniging Radio Omroep (A.V.R.O.). 11.40 *a.m.*—Gramophone Records of Variety Music.
12.10 *p.m.*—*Concert by the Wireless Chamber Orchestra*, conducted by Louis Schmidt. Overture, Nordische Sennfahrt (Gade). Selection from "Coppélia" (Delibes-Tavan). Zingaresca (Ellerton). Ideale (Tosti). For a Kiss (Tosti). Waltz (Ganne). Selection from "Mignon" (Thomas). The Wedding of the Marionettes (Kockert). Waltz, Grubenlichter (Zeller). Hoch- und Deutschmeister-Marsch (Ertl).
1.40—Talk.
2.10—*Concert by the Wireless Orchestra*, conducted by Nico Treep. Paraphrase on an Old Soldier's Song (Alterego). Overture, "Tancred" (Rossini). Selection from "The Merry Peasant" (Fall). Waltz, Dolores (Waldteufel). Gramophone Records of Variety Music. Rendez-vous bei Lehár (Hruby). A Festival in Havana (Filipucci). Ballet de cour (Pierné). March, Blaze Away (Holzmann).
3.40—7.40—V.A.R.A. Programme.
3.40—*Pianoforte Recital from the Works of Haydn*. Sonata No. 5 in C Major. Caprice. Fantasia. Symphony No. 63, La Roxelane.
4.10—Programme for Children.
4.40—*Orchestral Concert*, conducted by Hugo de Groot. Selection from "Peterchens Mondfahrt" (Clemens Schmalstich). Serenade (Debussy). Two Selections from "Sleeping Beauty" (Tchaikovsky). Au Jardin—Suite for Wind Instruments (Dubois). Variations on a Dutch Children's Song (Wagemaker). Selection from "Hänsel and Gretel" (Humperdinck). Gramophone Records of Variety Music. Overture, "Die schöne Galathée" (Suppé). Spanish Waltz, Andalusia (Popy). Orientale (Cui). March (Monckton). 6.15—Talk: The Principles of the Workers' Socialist Party. 6.40—*Concert* (*contd.*). Potpourri, Für alle (Dostal). 6.55—Dramatic Selections. 6.25—*Concert* (*contd.*). Potpourri, Das Beste vom Besten (Dostal).
7.40—10.40—V.P.R.O. Programme.
7.40—Religious Address.
8.10—Haydn Concert. Soloists: Mlle. Willy Canté van Amerongen (Soprano). Mlle. Nelly Hugues (Contralto), Heer Tol (Tenor), Heer Jaap Stroomenberg (Bass), and Heer Alex Adema (Pianoforte). Wider den Uebermut. Aus dem Danklied zu Gott. Ein kleines Haus. Sonata in E Major. Stabat Mater. Der Greis. 8.40—Talk: The Principles of the Liberal Protestant Radio Society. 9.10—Concert (contd.). Die Beredsamkeit. Schäferlied. Sonata in D Major. Die Harmonie in der Ehe.
9.40—Religious Notes. 9.45—News Bulletin. 9.55—Talk on Haydn.
10.25—Gramophone Records of Variety Music.
10.40—11.40—V.A.R.A. Programme.
10.40—Address by Heer Premsela.
10.55—Gramophone Records of Variety Music. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

160 kc/s (1,875 m.); 8.5 kW.
Programme of the Christian Radio Society (N.C.R.V.). 7.40 *a.m.*—Reading. 7.55—Programme of Sacred and Classical Music on Gramophone Records. 10.10—Divine Service.
10.40—*Gramophone Concert*. The Toy Symphony (Romberg) by a Symphony Orchestra, conducted by Dr. Malcolm Sargent. Selection from "The Bartered Bride" (Smetana, arranged Fetras), by a Symphony Orchestra, conducted by Clemens Schmalstich. Organ Solos by Sydney Gustard: (*a*) Caprice viennois (Kreisler), (*b*) Serenade (Toselli). Selection from "Rosamunde" (Schubert) by the Dajos Béla Orchestra. 'Cello Solos by Pablo Casals: (*a*) Gavotte (Valentini), (*b*) Tonadilla (de Laserna). Overture, Egmont (Beethoven), by the Berlin Philharmonic Orchestra, conducted by Erich Kleiber. Selections by the Ricardo Salon Orchestra: (*a*) Serenade (Moszkovsky), (*b*) Polonaise (Chopin). Selection from "Cavalleria rusticana" (Mascagni), by a Symphony Orchestra, conducted by Selmar Meyrowitz. 11.40—Police Notes.
11.55—*Instrumental Concert for two Violins, 'Cello and Pianoforte*. Variations on "In naam van Oranje" (Horst). Overture, "Orpheus" (Offenbach). Selection from "La vie parisienne" (Offenbach). Quintessence (Morena). Spanish Dances (Moszkovsky). Barcarolle (Tchaikovsky). An der Weser (Pressel). Humoresque (Dvorak). Puszta Legends (Lindsay-Theimer). Selection from "The Mastersingers" (Wagner). Overture, "Raymond" (Thomas).
1.40 *p.m.*—Talk on Mothercraft. 2.10—Programme to be announced.
2.40—Vocal and Instrumental Concert. Bass-Baritone Solos (Johann Sebastian Bach): (*a*) Gib dich zufrieden und sei Stille, (*b*) Gott lebet noch, (*c*) Herr nicht schicke deine Rache. Sonata in G Major for Violin and Pianoforte (Johann Sebastian Bach). Contralto Solos (Händel): (*a*) Dove sei amato bene, (*b*) Tutta raccolt'ancor. Recitative and Aria for Bass-Baritone from "The Creation" (Haydn). Contralto Solo from "Stabat Mater" (Haydn). Sonata in F Major for Violin and Pianoforte (Haydn). Bass-Baritone Solos: (*a*) Ist nicht des Herrn Wort from "Elijah" (Mendelssohn), (*b*) Three Songs (Tchaikovsky). Violin Solos: (*a*) Havanaise (Saint-Saëns), (*b*) Hymn to the Sun (Rimsky-Korsakoff). Contralto Solos (Duparc): (*a*) La vie antérieure, (*b*) L'invitation au voyage, (*c*) Le manoir de Rosamonde.
4.40—Programme for Young People.
5.10—Talk on Photography. 5.40—Talk by Heer Steinvoort. 6.10—A Visit to the Radio Doctor. 6.40—Horticultural Talk. 7.10—Police Notes. 7.25—Talk: Travelling in Germany.
7.40—Haydn Concert by the N.C.R.V. Symphony Orchestra, conducted by Frits Schuurman. Divertissement. Overture, "L'isola disabitata." Serenade for String Orchestra. Symphony in D Major.
8.40—Talk by Heer Rijswijk.
9.10—*Concert* (*continued*). Violin Concerto. Das Ochsenmenuett. Symphony concertante. 9.40 (in an interval)—News Bulletin.
10.10—*Gramophone Concert*. Old Comrades, by the United Guards Band. Two Selections by the Frederick Hartley Novelty Quintet: (*a*) Albumblatt, (*b*) Romance. Song: Berceuse, by Yvonne Brisson. Selections by the Frederick Hartley Novelty Quintet: (*a*) Träumerei, (*b*) In my Heart, (*c*) Deep River. An Old Violin, by the New Devonshire Orchestra. Scottish Melodies by Robert Kirk (Violin). Selections by the Hungarian Cigány Orchestra: (*a*) Two Guitars, (*b*) Gajda Troika. The Wayside Rose, by the Cranbourne Orchestra. Selections by Reginald King and his Orchestra: (*a*) Moonbeams Dance, (*b*) Serenade. Sambre et Meuse, by the United Guards Band. 11.10 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See *Copenhagen*.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
Transmits at intervals from 5.45 a.m. (Exercises, Weather, Time and Gramophone Concert).
10.20 *a.m.*—*Gramophone Concert*. Overture, "Rienzi" (Wagher), by the Berlin Philharmonic Orchestra. Tenor Solo by Joseph Schmidt: Aria from "La Juive" (Halévy). Two Records by Georg Kniestadt and his Orchestra: (*a*) Waltz, Freut euch des Lebens (Johann Strauss), (*b*) Waltz Intermezzo, Vineta-Glocken (Lindsay-Theimer). Chopin Potpourri for Two Pianofortes and Full Orchestra. Folk Melody, Glückauf, by the Choir of St. Mary's, Beuthen. Rheinländer-Potpourri (Robrecht), by Alfred Beres and

FRIDAY continued

his Orchestra. Song by Emil Baebler (Tenor) and Herbert Hertrampf (Vibraphone): Grün ist die Heide (Blume-Lüling). Gallop for Xylophone with Orchestra, Die lustigen Drei (Sommerfeld).
11.50—Weather Report, Economic Notes and Time Signal. 12 *noon*—Orchestral Concert, conducted by Eysoldt. 1.30 *p.m.*—Sponsored Gramophone Concert. 2.30—Economic Notes and Time Signal. 2.50—Programme for Children: Drawing and Painting. 3.20—Young People's Programme—a Radio Play and Talk: Masterpieces with Soap-Bubbles.
4.0—See *Frankfurt*. 5.10—The World on Gramophone Records: In a Macedonian Gipsy Quarter (Jonny Behm). 5.40—*English Conversation*. 6.0—Weather Report, Time Signal, Economic Notes and Sports Forecast. 6.15—Topical Talk. 6.30—Talk on the West German Industrial Area—Mining in the West. 6.55—First News Bulletin. 7.0—Talk by Kurt G. Sell: What People are talking about in America, relayed from *New York*.
7.15—Variety for Orchestra—a Humoresque for Solo Instruments and Orchestra (Siegfried Scheffler). Conductor: Paul van Kempen. Signal. March Past of the Instruments. Violin Song. The Trombone's Star Turn. Oboe-Idyll. The 'Cello's Serenade. Two Humorists—the Bassoon Brothers. Flute Rococo. The Clarinet in a Descriptive Piece. Selection by the "Good Wood" Vocal Quartet. Three Triller Girls. Entrada—the Orchestra. The Piccolo on the Trapeze. Grotesques by the Double Bass. Cigány Music for Strings. Popular Song by the Trumpets. Eccentric for Percussion Instruments. The Dwarf and the Giant—the Piccolo and Bass Tuba. Sketch for Brass Instruments. Final Scherzo and Tutti-frutti by the Orchestra. A Last Word. After the concert, News, Sports Notes and Orchestral Concert, conducted by Wolf.
10.0—Concert relayed from the Café Schwerthof, *Cologne*. 11.0—(approx.)—Close Down.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.). Transmits at intervals from 5.30 a.m. (*Witzleben* Relay).
3.30 *p.m.*—*Concert by the Leipzig Symphony Orchestra, conducted by Theodor Blumer*. Overture, "The Kiss" (Smetana). Gay Music for Orchestra (Schanze). Geheimnisvoller See (Schroeder). Waltz from "Love in the Snow" (Benatzky). Military Marches Nos. 1 and 2 (Singer). Spanish Rhapsody (Richardy).
4.30—Book Review. 4.50—Economic Notes and Weather. 5.0—Time Signal. 5.2—Talk on Social Insurance. 5.25—*English Lesson*. 5.50—Talk: The Inventor of Morse Telegraphy—on the Sixtieth Anniversary of Morse's Death. 6.0—Talk on Bismarck.
6.30—*Concert by the Leipzig Symphony Orchestra, conducted by Hilmar Weber*. Overture, "La Cloche de l'Eremite" (Maillart). Viennese Dances Nos. 1 and 2 (Friedmann-Gärtner). Symbolic Suite (Stoether): (*a*) Gavotte, (*b*) Nocturne, (*c*) Meditation and Rondo, (*d*) Capriccio-Finale. Waltz from "Film Magic" (Kollo). Selections from "The Circus Princess" (Kálmán). March, Die Jugend marschiert (Lindemann).
7.0—Talk by Kurt Sell: What People are talking about in America, relayed from *America*. 7.45—Cabaret Concert. 9.15—News, followed by Dance Music. 10.30 (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.
10.30 *a.m.*—Programme for Schools. 11.15—Light Music on Gramophone Records. 11.45—News Bulletin. 12 *noon*—Time and Light Music on Gramophone Records.
4.30 *p.m.*—Orchestral Concert. 5.30—Programme for Women. 6.5:—See *Vienna*. 8.0—Popular Music on Gramophone Records. 9.0—Time and News Bulletin.

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.
10.45 *a.m.*—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—Light Music on Gramophone Records.
12.10 *p.m.*—See *Warsaw*. 2.0—Popular Music on Gramophone Records. 2.15—See *Warsaw*. 2.20—A Gramophone Record. 2.25—See *Warsaw*. 3.10—Programme for the Sick: Address and Music. 3.30—Light Music on Gramophone Records and Topical Talk. 3.55—See *Warsaw*. 4.10—Talk on April Fools' Day Jokes. 4.25—Vocal and Orchestral Concert. 5.50—Miscellaneous Items. 6.10—Answers to Correspondents and Programme Announcements. 6.30—See *Warsaw*. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT). 6.44 kc/s (465.8 m.) 1.5 kW.
Transmits at intervals from 8.0 a.m.
10.0—Orchestral Concert.
1.0 *p.m.*—Instrumental Concert. 4.30—Concert by the Station Orchestra. 7.0—Orchestral Concert. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Literary Programme.

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.
8.0—9.0 *a.m.*—Topical Review. 11.0—Relay from the Senate House.
2.0 *p.m.*—Chimes, Time Signal, Weather Forecast, Amusement Guide and *Concert by the Station Sextet*. Selection from "The Mastersingers" (Wagner). Alma de Dios (Serrano). Selection from "The Huguenots" (Meyerbeer). March from "The Twilight of the Gods" (Wagner). Cinema Review. Heraldos (Barcarisse). Juegos Malabares (Vives).
3.20—News and Radio Journal. 3.30—Interval. 7.0—Chimes, Exchange Quotations, Market Prices and Request Concert on Gramophone Records. In the interval at 7.30—Talk. 8.15—Announcements and Parliamentary Journal. 8.30—Interval.
9.30—Chimes, Time Signal, Radio Journal and Symphony Concert on Gramophone Records. 10.30—Dance Music. 11.45—News, Radio Journal and Review of the Coming Week. 12 *midnight*—Chimes and Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*.

MUNICH (Germany)

563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.); and *Nürnberg*, 1,256 kc/s (239 m.).
Transmits at intervals from 9.0 a.m.
4.25 *p.m.*—*Concert conducted by Theo Freitag*. Russian March (Dagmaroff). Overture (Zimmer). Waltz, So tanzt Man in Wien (Zeller). Russian Suite (Elughen). Intermezzo (Rhode). Scenes from "Tunis" (Mouton). Song from "Love in the Snow" (Benatzky). En Carriole (Gabriel-Marie).
5.25—Weather and Snow Report. 5.35—Talk: Beauty and Style in Sport. 5.55—Talk: The Palatinate.
6.15 (from *Nürnberg*)—Concert by the Munich Zither Society. In the interval, Talk: Occult Phenomena. 6.45—Talk: Events Abroad.
7.0—"Josef Haydn"—A Musical Picture (Czibulka and Aulich), by the Wireless String Quartet, the Wireless Orchestra, conducted by Edouard Zengerle, Richard Staab (Pianoforte) and L. Pflüger (Soprano).
8.20 (from Nürnberg)—Programme for Listeners in a Hurry, arranged by Dr. Alfred Graf. 9.20—Time, Weather, News, Sports Notes and Snow Report.
9.50—Talk: What they are talking about in America, relayed from *America*. 10.5 (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.); *Porsgrund*, 662 kc/s (453.2 m.); and *Rjukan*, 671 kc/s (447.1 m.).
9.30 *a.m.*—Programme for Schools. 10.35—Talk for Schools. 4.0 *p.m.*—Variety Music on Gramophone Records. 4.30—Talk for Teachers. 5.0—French Lesson. 5.30—Popular Music by a Saxaphone Quintet. 6.0—Announcements, Weather and News Bulletin. 6.30—*English Lesson*. 7.0—Time Signal. 7.2—Talk: Peace and the Disarmament Conference. 7.30—Tenor Song Recital by Ali Khan. 8.10—Finn Halvorsen reads from his own Works. 8.40—Weather and News Bulletin. 9.0—Topical Talk.
9.15—Haydn Chamber Music by the Philharmonic String Quartet. String Quartet in G Minor, Op. 74. Sonata in D Major. Pianoforte Trio in G Major. 10.0 (approx.)—Close Down.

PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW.
Transmits at intervals from 11.45 a.m.
4.30 *p.m.*—Dance Music relayed from the Olympia Tea Room. 7.0—Giornale dell'Enit, Agricultural Report, Report of the Geographical Society and Giornale Radio. 7.20—Light Music on Gramophone Records. 7.35—Time Signal and Announcements. 7.45—Giornale Radio.
7.50—*Concert of Variety Music*. Soloists: Nini Misiti (Pianoforte), Sistina Lo Jacono (Violin) and Hella Hette Di Gregorio (Soprano). Two Pianoforte Solos: (*a*) Nocturne (Scriabin), (*b*) Concert Etude (Martucci). Violin Solo: Sonata in D Major (Corelli). Two Soprana Solos: (*a*) in meiner Heimat (Hildach), (*b*) Das Zauberlied (Meyer-Helmund). Two Pianoforte Solos: (*a*) La Ronde des Arlequins (Pick-Mangiagalli), (*b*) Danse d'Olaf (Pick-Mangiagalli). Talk by F. De Maria. Two Soprano Solos: (*a*) Ultimo Canto (Savasto), (*b*) Song from "The Huguenots" (Meyerbeer). Two Violin Solos: (*a*) Chanson arabe (Rimsky-Korsakoff), (*b*) La Caccia (Paganini-Principe). After the Concert, Dance Music on Gramophone Records. 9.55—News Bulletin and Close Down.

PARIS (France)

Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW.
Time Signals (on 2,650 m.) at 9.26 a.m. and 10.26 p.m. (preliminary and 6-dot signals).
5.45 *p.m.*—Le Journal Parlé. 7.20—Weather Forecast.
7.30—*Symphony Concert*, conducted by Edouard Flament. *Spanish Programme*. Four Selections (Albéniz-Salabert): (*a*) Prelude, (*b*) Barcarolle, (*c*) Granada, (*d*) Orientale. Aragonesa (Falla-Mouton). Three Spanish Dances for Pianoforte (Granados). Selections (Turina-Chapelier): (*a*) Summer Night on the Terrace, (*b*)

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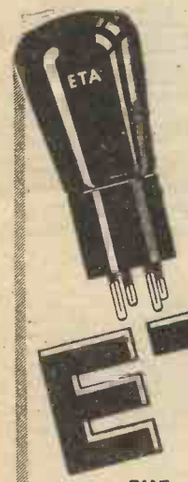

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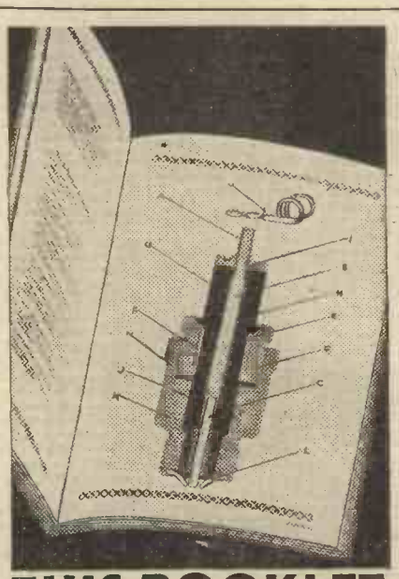

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8.0—Programme of Songs and Variety Items.

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.
12 *noon*—Gramophone Records, News and Announcements. 12.15 *p.m.*—Variety Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Popular Music on Gramophone Records, Talks and News.
7.30—*Concert of Jazz Music by the Station Jazz Orchestra*, conducted by M. Crickett Smith, with the collaboration of Miss Mabel Mercer. Rumba, Siboney (Lecuona). You forgot your Gloves (Lehár). I don't know why (Alhert). When the Moon comes over the Mountain (Woods). Cuban Holiday (Warschauer). A Faded Summer Rose (Baxter). Guilty (Kahn, Akst and Whiting). Romany Rose (Wayne). Sweet and Lovely (Arnheim, Tobias and Lemare). Les Trois Coups (Simons). Why dance (Alhert). Love Letters in the Sand (J.-F. Coots). I'm thru' with love (Malneck and Livingstone).
8.30—Gramophone Records, Talk and News Bulletin. 8.45—Programme of French Songs by Music Hall Artistes. 10.45—News Bulletin. 10.50 (approx.)—Close Down.

PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.
6.45 *a.m.*—Physical Culture Lesson. 7.30—Weather and Physical Culture (continued). 7.45—Variety Music on Gramophone Records. 8.0—News, Weather and Press Review. 12 *noon*—Programme of Jewish Literature and Music.
12.30 *p.m.*—*Gramophone Records.* Overture, "The Barber of Seville" (Rossini). Selection from "Falstaff" (Verdi). Selection from "La Sonnambula" (Bellini). Cavatina from "The Queen of Sheba" (Gounod). Selections from "Le Roi malgré lui" (Chabrier). Introduction to the First Act of "Fervaal" (d'Indy). Selections from "Penelope" (Fauré). Selection from "L'attaque du moulin" (Bruneau). Overture, "Le Roi d'Ys" (Lalo). Aria from "Hérodiadé" (Massenet). Selection from "Louise" (Charpentier). Dance from "Samson and Delilah" (Saint-Saëns). In the intervals at 1.0—Exchange, News and Weather; at 1.30—Exchange, and at 2.0—Exchange and Announcements.
3.45—Exchange and Market Prices.
4.45—Talk by Jean Chantavoine: The History of Music with Gramophone Illustrations: Wagner—Selections from "Tannhäuser" and "Lohengrin." 6.30—Market Prices, Weather, Agricultural Report and Racing Results. 7.0—Talk on the Colonies. 7.45—Commercial Prices and News.
8.0—Haydn Concert. The Orchestra conducted by Eugène Bigot and the Amicitia Choir. The Oxford Symphony. Selections from "The Seasons": (*a*) Spring, (*b*) Winter. In the intervals at 8.30—News, Weather and Gastronomic Review, and at 9.15—Press Review and News.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; *Lausanne*, 442 kc/s (680 m.); and *Geneva*, 395 kc/s (760 m.).
Transmits at intervals from 11.30 a.m.
6.1 *p.m.* (from *Lausanne*)—Light Music on Gramophone Records. 6.20 (from *Lausanne*)—Sports Notes. 6.30 (from *Lausanne*)—Readings. 6.55—Announcements. 7.0 (from *Geneva*)—Talk: The First of April. 7.10 (from *Geneva*)—History Talk. 7.30 (from *Lausanne*)—Cabaret Concert by René Bersin and his Company. 8.40 (from *Geneva*)—Programme by the Yodelling Club "Alphütli." 9.0—Weather and News. 9.15 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW.
Transmits at intervals from 10.0 a.m.
6.0 *p.m.*—Weather Forecast.
6.5—*Concert on the Bi-Centenary of Haydn's Birth.* String Quartet. Symphony in G Major.
7.0—News Bulletin. 7.10—Orchestral Concert. 8.0—Weather Forecast. 8.30—Concert of Light Music. 9.30 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (1RO). 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.), and 2RO, 3,750 kc/s (80 m.).
7.15—7.30 *a.m.*—Giornale Radio and Announcements. 11.0—Gramophone Records of Variety Music. 11.35—Weather Forecast.
11.45—1.0 *p.m.*—*Vocal and Instrumental Concert.* Soloists: Vera Nadia Poggioli (Soprano) and Walter Sommer ('Cello). The Station Sextet. Soprano Solos: (*a*) Lusinga (de Curtis), (*b*) Il pescatore canta (Tosti), (*c*) Portami via (Tirindelli). 'Cello Solos: (*a*) Intermezzo from "Goyescas" (Granados), (*b*) Hungarian Caprice (Dunkler). Selection from "The Magic Flute" (Mozart). Hymne aux fleurs (Fauchey). Two Songs (Grieg): (*a*) Ich liebe dich, (*b*) An den Frühling. Selection from "Frasquita" (Lehár). Rintocchi allegri (Nucci). Serenade, To You (Czibulka). In the intervals at 12.15—Giornale Radio and Exchange Quotations, and at 12.30—Time and Announcements.
4.0—Exchange, Programme for Children, Giornale Radio and Announcements.
4.30—*Song Recital by Maria Senes (Soprano).* Aria from "The Marriage of Figaro" (Mozart). Donne vaghe (Paisiello). Cavatina from "The Thieving Magpie" (Rossini).
4.45—*Variety Concert.* A B C (Chiarelli). Canta, bandoneon (d'Ardenia). Overture, "La Mascotte" (Audran). Aranci (Mariotti). Passione tzigana (Rusconi). Selection (Lao Schorr).
5.15—Giornale dell'Enit. 5.55 (from *Naples*)—Shipping and Sports Notes. 6.0—Agricultural Notes, Weather, Announcements, Giornale Radio and Press Review. 6.50—Gramophone Records of Variety Music. 7.0—Time and Announcements. 7.5—Report of the International Institute of Agriculture (in Italian, French, *English*, German and Spanish). 7.30—Sports Notes and Announcements.
7.45—"Il paese del campanelli"—Operetta in Three Acts (Lombardo and Ranzato) conducted by Alberto Paoletti. In the intervals: Talk on Literature and Art and Topical Review. 9.55—News Bulletin.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.).
Transmits at intervals from 11.45 a.m.
9.0 *p.m.*—Betty Moore (Decorating Notes) from *New York*. 9.15—Roger Sweet (Tenor). 9.30—Stock Reports and Police Notices. 9.45—Musical Ad. Men. 9.55—News Bulletin. 10.15—"Skippy" from *New York*. 10.30—New York State Department Talk. 10.40—Ollie Yettru (Pianist). 10.45—Russ Columbo and his Orchestra.
11.0—All Saints' Cathedral Programme. 11.29—Time Signal. 11.30—With Gray McClintock in the Canadian Northwest. 11.45—Musical Programme from *New York*. 12 *midnight* (WGY only)—General Electric Programme. 12 *midnight* (W2XAF only)—Stock Reports and News Items.
12.15 *a.m.* (*Saturday*)—Campbell Orchestra from *New York*. 12.30—Prince Albert Quarter Hour from *New York*. 12.45—Trials of the Goldbergs from *New York*. 1.0 (WGY only)—Cities Service Programme from *New York*. 1.0 (W2XAF only)—International General Electric Programme. 1.30—WGY Agricultural Programme. 2.0—Clicquot Club Eskimos from *New York*. 2.30—Pond's Programme from *New York*.
3.0—NBC Artists Service Hour from *New York*. 3.30—RKO Programme from *New York*. 4.0—Freddy Engel's Orchestra. 4.30—Jack Miles and his DeWitt Clinton Orchestra. 5.0—Ralph Kirbery (Dream Singer) from *New York*. 5.5—Hotel New Yorker Orchestra, from *New York*. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BERO-MÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).
11.28 *a.m.*—Time Signal from the Neuchâtel Observatory. 11.30—

FRIDAY
continued

Weather and News. 11.40—Concert by the Station Orchestra.
12.35 *p.m.*—Weather and Exchange Quotations. 12.45—2.30—Interval.
2.30—Gipsy Music on Gramophone Records. 3.0—Concert by the Station Orchestra. 4.0 (from *Zürich*)—Programme for Women. 4.30—Weather and Market Prices. 4.40—5.30—Interval.
5.30—Champion Yodellers on Gramophone Records. 6.0 (from *Basle*)—Elementary Italian Lesson. 6.25—Sports Forecast. 6.28—Time and Weather. 6.30 (from *Basle*)—Talk on Health. 7.0 (from *Berne*)—"Breaking the Record"—a Packed Half-Hour.
7.30—Concert by Juan Manen (Violinist), with the Berne Municipal Orchestra, conducted by Dr. Nef. Willy Girsberger at the Pianoforte. 9.0—Weather, News and Tourist Bulletin. 9.15 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by *Boden*, 244 kc/s (1,229 .5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Östersund*, 389 kc/s (770 m.); and *Sundsvall*, 554 kc/s (542 m.)
Transmits at intervals from 6.20 a.m.
4.0 *p.m.*—Programme for Girls. 4.20—Rural Music and Reading. 5.0—Variety Music on Gramophone Records. 6.0—Agricultural Report. 6.30—Talk.
7.0—Haydn Concert. Soloists: Magda Sjögren and Gunnar Norrby ('Cello). Symphony No. 49 in F Minor. "Divertimento" No. 3 in E Flat Major. Arias from "The Seasons." Concerto in D Major for 'Cello and Orchestra.
8.15—A Sketch. 8.45—Weather and News.
9.0—*Concert.* Overture, "Die schöne Galathee" (Suppé). Waltz from "Die Bayadere" (Kálmán). Berceuse No. 2 (Svendsen). In a Hong-Kong Street (Humphries). Selection from "La Bohème" (Puccini). Valse caprice (Rubinstein). Potpourri (Recktenwald).
10.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.
10.30 *a.m.*—*Gramophone Concert.* Concerto for Violin and Orchestra (Beethoven). Two Arias from "The Damnation of Faust" (Berlioz). Autumn and Poème d'un jour (Fauré). Petite Suite (Debussy). Hungarian Dance No. 1 (Brahms). Ronde des lutins (Bazzini).
12.45 *p.m.*—News in French and German. 1.0—Time Signal.
1.2—*Gramophone Concert.* Duet from "Mignon" (Thomas). Jewel Aria from "Faust" (Gounod). Aria from "The Barber of Seville" (Rossini). Aria from "Mireille" (Gounod). Aria from "The Pearl Fishers" (Bizet). Selection from "Lakmé" (Delibes). L'heure tranquille (Perez). The Three Faded Flowers (Fattorini). Bruyères (Debussy). Frolie Sax (Viard). The Postillons (Rodionoff). Waltz, España (Waldteufel). Waltz, Künstlerleben (Johann Strauss). Maremma (Rossi). Waltz, (Grunefeld). Selection from "The Nuremberg Doll" (Adam).
4.45—Literary Talk in French: Marcel Proust.
5.0—*Orchestral Concert* conducted by Roskam. Les Gardes nobles (Lehnhardt). Selection from "The Last Waltz" (O. Straus). Selection (Kapeller). Trio from "La Tosca" (Puccini). 'Cello Solo: Musette—a Seventeenth Century Air (Offenbach). Selection (Szulc). Blumenlied (Lange). Serenade (Moretti). March, Folies bergères (Lincke).
6.0—Topical Talk in German. 6.15—Legal Talk in German.
6.30—*Gramophone Concert.* Fantastic Dance (Turina). Légende naïve (Jongen). Romance (Wieniavsky). Selection from "L'Enfant prodigue" (Debussy). Iberia (Debussy). Don Juan (Richard Strauss). Song without Words (Mendelssohn). Melody (Tchaikovsky). Selection from "The Singing Fool" (Connelly). 7.30—Time Signal. 7.32—News in French and German.
7.45—*Gramophone Concert.* Selection from "Madame Butterfly" (Puccini). Selection from "The Merry Widow" (Léhár). Les hommes ne mentent jamais (Borel-Clerc). Saint Catherine (Bosc). Tango (Lazarro). Torna a Sorriento (de Curtis). Polka (Delion). Charme des Fleurs (Fontana). The Peanut Vendor (Sunshine). Beneath your Balcony (Klein).
8.30—Concert of Chamber Music relayed from Mulhouse. Rondino for Wind Instrument Octet (Beethoven). Sonata for 'Cello and Pianoforte (Beethoven). Mulhousian Waltzes, Part 2. Serenade for Nine Wind Instruments (Ehrhart). Little Symphony for Wind Instruments, Harp, Kettledrum and Tubas (Montefeuillard). 10.30 (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiburg*, 527 kc/s (570 m.).
Transmits at intervals from 5.15 a.m.
11.0 *a.m.*—Weather and Snow Report. 11.5—Sponsored Concert.
11.35—*Gramophone Concert.* Potpourri of Mozart's Works. Lortzing Potpourri. Grieg Potpourri. Selections from Verdi's Opera Music. Selection from "Carmen" (Bizet). Selection from "I Pagliacci" (Leoncavallo). Selection from "Cavalleria Rusticana" (Mascagni). Puccini Potpourri. Offenbach Potpourri.
12.30 *p.m.* (in the interval)—Time and News. 1.30—2.0—*Advanced English Lesson.* 3.30—Talk: Alsatian Legends.
4.0—Concert from *Frankfurt*. 5.30—Time and Agricultural Report. 5.40—Programme to be announced. 6.5—Medical Talk. 6.30—Time and Weather.
6.35—*Mandoline Concert* relayed from *Mannheim*. March, Heil Europa (Blon). Russian Folk and Dance Melodies: Wolgaklänge (Ritter). German Folk and Dance Melodies: Unter der Dorflinde (Ritter). Waltz, Münchner Kindl (Komzak). March, Amazonenritt (Ritter).
7.5—Symphony Concert by the Stuttgart Philharmonic Orchestra relayed from the Liederhalle. Soloist: Rudolf Serkin (Pianoforte). The Military Symphony in G Major (Haydn). Pianoforte Concerto in G Minor (Mendelssohn). Burlesque for Pianoforte and Orchestra (Richard Strauss). Tänzwalzer (Busoni).
8.45—"*Liebe im Lärm*"—a Radio Play. 9.30—News Bulletin. 9.45—Dance Music. 11.0 (approx.)—Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.
7.15—11.30 *a.m.*—See *Turin*. 11.30—Variety Music on Gramophone Records. 11.45—See *Turin*.
12 *noon*—*Quintet Concert.* Minnesota (D'Acchiardi). Aubade à Fauvette (Filippini). Addio, pallide bambine (Amadei). Magda (Di Parano). Selection from "Siberia" (Giordano). Waltz, Golden Rain (Waldteufel). Rududù (Chiappo).
1.0—3.55—See *Turin*.
3.55—*Quintet Concert.* Overture, "Alessandro Stradella" (Flotow). Selection from "Die Faschingsfee" (Kálmán). A te sola (Giuliani). Potpourri, Hört und staunt (Dostal). Fior di mimosa (Zuccoli). Senza di te (Gozzolino). Fox della virtu (De Micheli).
4.50—6.10—See *Turin*. 6.10—Quintet Concert. 7.0 till Close Down—See *Turin*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.), and *Genoa*, 959 kc/s (312.8 m.).
7.15 *a.m.*—Giornale Radio. 7.30—Food Market Prices.
10.15—*Concert.* Comedy Overture (Kéler-Béla). Burlesca (Culotta). Pizzola Liù (Meniconi). Due chitarre (Ferraris) Operetta Revue (Fetras). Juliska (Michiels). Alma cubana (Greppi). Fantasia, Casa mia, casa mia (Pietri). The Tea Caravan (Niemann). Torment (Ibañez). Alcazar (Firpo).
11.30—Gramophone Records of Variety Music. 11.45—Giornale Radio.
12 *noon*—Time and Announcements.
12.2 *p.m.*—1.30—*Concert.* War March of the Priests from "Athalie" (Mendelssohn). Overture, "A Carnival in Rome" (Johann Strauss). Suite, Ballet égyptien (Luigini). The Favourite Flower (Hummer). Immer voran (Ziehrer). Selection from "La Traviata" (Verdi). Round the Hemisphere (Yoshitomo). Liselotte (Komzak). In the interval: Exchange Quotations.
1.30—3.15—Interval. 3.15—Giornale Radio. 3.30—Programme for Children. 3.45—Gramophone Records of Variety Music. 4.50—Giornale Radio, Racing Results and Announcements. 5.45—Agricultural Notes and Report of the Royal Geographical Society. 6.5—Announcements.
6.10—*Musical Selections.* Overture, "The Nuremberg Doll" (Adam). Malie di gitana (Mariotti). Selection from "The Blue Mazurka" (Lehár). Suggestioni d'Oriente (Piovano).
6.30—Time and Announcements. 6.31—Gramophone Records of Variety Music. 7.0—Giornale Radio, Weather, Talk and Gramophone Records of Variety Music. 7.50—Wireless Talk.
8.0—Variety Concert. In the intervals: Talk on History and Review of New Books.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.); *Innsbruck*, 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.); and *Salzburg*, 1,373 kc/s (218 m.).
Transmits at intervals from 8.20 a.m.
8.0 p.m.—"The Seasons"—Oratorio (Haydn), relayed from the Concert House. The Choir of the Vienna Academy, the Vienna Schubert Society and the Vienna Symphony Orchestra, conducted by Bruno Walter. Soloists: Josef Manowarda (Bass), Thea Böhm-Linhard (Soprano) and Julius Patzak (Tenor).
8.50—Weekly Microphone Feuilleton. 9.20—Weather and News. 9.35—Gramophone Dance Music.

WARSAW (Poland)

Polskie Radio, 212.5 kc/s (1,411 m.); 120 kW.
10.20 *a.m.*—Aviation Weather Report. 10.25—Interval. 10.45—Press Review. 10.58—Time Signal and Bugle Call from St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Light Music on Gramophone Records.
12.10 *p.m.*—Weather Report. 12.15—Economic Report. 12.25—Interval. 12.35—Light Music on Gramophone Records. 12.45—1.45—Interval.
1.45—Light Music on Gramophone Records. 2.15—Report of Polish Musical Societies. 2.20—Interval. 2.25—Historical Talk. 2.45—Exchange Quotations and Hydrographic Report. 2.50—Literary Talk. 3.10—Light Music on Gramophone Records. 3.20—Wireless Correspondence 3.40—Light Music on Gramophone Records. 3.55—*Linguaphone English Lesson.* 4.10—Talk: Some April Fool's Day Jokes.
4.35—*Concert by an Orchestra of Wind Instruments.* Conductor: André Bromke. Overture, "Light Cavalry" (Suppé). Gavotte, Erstes Herzklopfen (Eilenberg). Waltz, España (Waldteufel). Selections from "La Traviata" (Verdi). Overture, "L'Etoile du Nord" (Carmont). Sans façon (Duval). Mazurka (Namyslovsky). March (Bielsky).
5.50—Miscellaneous Items. 6.15—Agricultural Press Review from *Wilno*, 533 kc/s (563 m.). 6.25—Programme Announcements. 6.30—Sports Notes. 6.35—Light Music on Gramophone Records. 6.45—Radio Journal. 7.0—Talk on Music.
7.15—Symphony Concert by the Warsaw Philharmonic Orchestra, conducted by Ign. Neumark. Soloists: Marie Freund (Songs) and Jacob Kalecki (Pianoforte). Overture, "Euryanthe" (Weber). Pianoforte Concerto (Maliszevsky). Songs: (*a*) Recitative and Lament from "Arianna" (Monteverdi), (*b*) Lieder eines fahrenden Gesellen (Mahler). Symphony in E Minor, No. 4 (Brahms). Reading in the interval.
9.40—Radio Journal. 9.45—News Bulletin. 9.50—Dance Music.

WILNO (Poland)

533 kc/s (563 m.); 16 kW.
10.58 *a.m.*—Time Signal. 1.10 *p.m.*—Programme Announcements. 1.15—Concert of Operetta Music on Gramophone Records. 2.15—See *Warsaw*. 3.10—Programme for Children. 3.40—Reading. 3.55—See *Warsaw*. 4.35—Concert for the Bi-Centenary of the Birth of Haydn on Gramophone Records. 5.2—Recitations.
5.10—*Concert of Chamber Music.* Sonata in A Major Op. 12 (Beethoven). Sonata in G Major, Op. 13 (Stojovsky).
5.30—A Report. 6.0—Talk for Poles in Lithuania. 6.15—Agricultural Press Review. 6.25—Humorous Talk. 6.40—Programme Announcements. 6.45—See *Warsaw*.
10.0—Recital by Paderevsky relayed from *America*.

SATURDAY (April 2)

PRINCIPAL EVENTS

SYMPHONY CONCERTS

6.35 p.m. Vienna, Warsaw: Vienna Philharmonic Orchestra and Casals—Haydn programme.
7.0 „ Schweizerischer Landessender: Conducted by Weingartner.
8.0 „ Italian (N.).

CONCERTS (Vocal and Instrumental)

7.5 p.m. Stuttgart, Frankfurt: The Mannheim National Theatre Orchestra.
8.0 „ Brussels No. 1: The I.N.R. Orchestra.
8.30 „ Strasbourg: Concert and Ball.
9.10 „ Copenhagen: Popular.

OPERAS AND OPERETTAS

7.0 p.m. Bucharest: "Manon" (Massenet) (gramophone).
7.45 „ Rome: Relay from San Carlo, Naples.
8.0 „ Dublin: "La Bohême" (Puccini) (studio).

RECITALS

4.30 p.m. Budapest: Hungárian songs, accompanied by Karl Bura's Cigany Band.
9.10 „ Warsaw: Chopin, played by the winner of the 1st prize in the 2nd International Chopin competition.

PLAYS AND TALKS

3.10 p.m. Hilversum: "Le Fou avec la Hache" (Japanese fairy tale).
8.45 „ Radio-Paris: "Chansons et Poésies."

MISCELLANEOUS

7.0 p.m. Heilsberg, Breslau, Berlin, Königs Wusterhausen (7.30), Leipzig (7.30): Variety programme.
7.0 „ Munich: "Salvator" Evening on the Nockherberg.
7.45 „ Stockholm: Rural programme, from Göteborg.

DANCE MUSIC

10.0 p.m. Copenhagen: Kai Julian's Band (till 11.15).
10.0 „ Hamburg: The "Scarpa" Orchestra.
10.30 „ Strasbourg: Freyberger Ball.

Casals Plays to Austria and Poland

Pablo Casals, the great Spanish 'cellist and conductor, was born in a small village near Barcelona, where his father was church organist. As a small boy he learned the flute, violin and pianoforte, and sang in his father's choir, but not until he was thirteen did he begin to study the 'cello under José Garcia. His progress was so rapid that within two years of his first lesson he won the first prize at the Barcelona Conservatoire. That remarkable achievement brought him to the notice of the Spanish statesman Morphy, who sent him to Paris with an introduction to the famous conductor Lamoureux, and from that date, his success has never been in doubt. In Barcelona he has founded a musical society of 10,000, to which working people can belong for a very small fee, and his concerts there attract students from all over Europe. He is the soloist in a Haydn concert at VIENNA this evening, which is being relayed by WARSAW.

San Carlo Theatre, Naples.

NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 *a.m.*—The Daily Service.
10.30—Time Signal (Greenwich), Shipping Forecast.
10.45—11.0—"What's in the Papers?"
12 *noon*—The Northern Studio Orchestra, directed by John Bridge.
12.45 *p.m.*—Reginald New at the Organ.
1.0—Time Signal (Greenwich).
1.30—2.30—The Commodore Grand Orchestra.
3.30—The Wireless Military Band. Walter Kirby (Tenor).
4.45—Time Signal (Greenwich).
4.45—Reginald Foort at the Organ.
5.15 (Daventry)—The Children's Hour.
5.15 (London and Northern)—The B.B.C. Dance Orchestra.
6.0—"The First News."
6.25—Interval.
6.30—Time Signal (Greenwich).
6.30—Welsh Interlude.
6.50—Topical Talk.
7.5—7.25—"The Common Earth"—VII. Mr. E. L. Grant Watson.
7.30—Students' Songs. Stuart Robertson (Bass). The Wireless Male Chorus.
8.0—Vaudeville. "A Telephone Rehearsal," by Ralph Neale. Margaret Coleman. Those Four Chaps: Bobbie Comber, Paul England, Claude Hulbert, Eddie Childs. Congress Squats. An epic of old Vienna, a story of romance and adventure amid the crowned heads of Europe in the glamorous setting of the first pole-squatting conference. Chic Farr assisted by Bert Farland. The B.B.C. Theatre Orchestra will play during the programme.
9.0—Time Signal (Greenwich).
9.0—"The Second News."
9.15—Shipping Forecast; New York Stock Market Report.
9.20—"On the 9.20." Conversations in the Train—XIII.
9.40—An Orchestral Concert. The B.B.C. Orchestra (Section E).
10.40—12 *midnight*—Dance Music.
11.30—Time Signal (Greenwich).

REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 *a.m.* (London and Northern)—The Daily Service.
10.30—11.0 (London and Northern)—Daventry National Programme.
12 *noon*—2.30 *p.m.* (London)—Daventry National Programme.
12 *noon* (Northern)—The Studio Orchestra.
12.45—2.30 *p.m.* (Northern)—Daventry National Programme.
3.30 (London and Northern)—Daventry National Programme.
3.30 (Midland)—The Studio Orchestra. Nita Valerie in "Character Sketches."
4.45 (Midland)—Daventry National Programme.
5.15—The Children's Hour.
6.0—"The First News."
6.25—Regional Sports Bulletin.
6.25—Midland Sport.
6.30 (London)—The Wakeford Burdee Octet. David Brynley (Tenor).
6.30 (Midland)—The Studio Orchestra.
6.30 (Northern)—Special Interlude.
6.45 (Northern)—"A Trunk Call"—A Farcical Sketch, by E. S. Darmady.
7.15 (Northern)—The Studio Orchestra (Augmented). Conducted by T. H. Morrison.
7.30 (Midland)—Organ Recital by S. D. Cunningham.
8.0 (London)—Who is It? A Guessing Programme of Celebrity Songs.
8.45—"The Gypsy Baron" ("Der Zigeunerbaron"). An Operetta. Music by Johann Strauss. Conductor, Adrian Boult. The Wireless Chorus and The B.B.C. Orchestra (Section D). Cast: Walter Glynne; Gladys Palmer; Percy Heming; Jan van der Gucht; Odette de Foras; Robert Maitland; Violet Marquesita; Nora Gruhn; Hughes Macklin.
10.15—"The Second News."
10.35 (Midland)—Experimental Transmission (Fultograph Process).
10.40—11.0 (Midland)—As London.
10.35—12 *midnight* (London and Northern)—Dance Music.

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.
7.30—8.30 *a.m.*—Topical Review.
11.0—Chimes and Weather. 11.5—1.0 *p.m.*—Interval. 1.0—Light Music on Gramophone Records.
1.30—*Concert by the Station Sextet.* March from "Tannhäuser" (Wagner). Consolation, No. 1 (Liszt). Selection from "Dédé" (Christiné). Minuet (Meyer). 2.0—Theatre Notes, Light Music on Gramophone Records and Film Notes. 2.20—*Sextet Concert* (continued). Capricho Catalán (Albéniz). Selection from "La Morería" (Millan). Prelude to "Guzman, el Bueno" (Breton). Roñseña (Ross).
2.50—Labour Exchange Report. 3.0—Programme for Hospitals and Benevolent Institutions. 4.0—6.0—Interval. 6.0—Programme for Children. 7.0—Concert of Spanish Music by the Station Trio. 7.30—Exchange Quotations, *English Lesson* and Press Notes. 8.0—Request Gramophone Concert. 9.0—Chimes, Weather, Market Prices and Agricultural News.
9.5—*Concert by the Station Orchestra.* March, Brisas del Guadalquivir (Fusabal). Selection from "Boris Godounoff" (Moussorgsky). Hungarian Dance No. 7 (Brahms). Allegro from the Symphony in G Major (Haydn). 9.30—See *Madrid.*

BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kw.
10.0 *a.m.*—Programme Announcements. 10.5—Light Music on Gramophone Records. 10.20—Tidal Report and Gramophone Records (contd.).
10.57—Time Signal and Chimes.
11.5—*Concert by the Station Orchestra.* Overture, Quo Vadis (Scassola). Iz Beograda i okolinâ (Brodil). Selection (Dvorák). Ballet Suite, La Farandole (Dubois). Selection from "The Tales of Hoffmann" (Offenbach). Czardas from "Der Geist des Wojewoden" (Grossmann). Viennese Waltz (Delmas). In the interval at 11.35—Exchange Quotations.
12.30 *p.m.*—Cinema Review and News Bulletin. 3.0—Divine Service Relay. 3.30—Request Concert of Gramophone Records.
4.15—*Concert by the Station Orchestra.* Overture, "La Belle Hélène" (Offenbach). Japanese Suite (Yoshitomo). Tango and Song (Frajt). Tango, Mona Vana (Frajt). Potpourri, Za moje prijatelje (Sedlacek). March, Uzdanica (Djordjevic).
5.40—Time Signal and Programme Announcements. 5.45—German Dialogue. 6.15—Talk (to be announced).
6.35—Relay from *Vienna.* 8.30 (approx.)—News Bulletin. 8.55—Relay of Foreign Stations. 9.30—Balalaika Concert relayed from the Imperial Hotel.

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert).
3.30 *p.m.*—Concert from *Hamburg.*
4.30—Health Talk. 4.50—Wireless Technical Talk. 5.5—Music Review.
5.30—Talk: The Dog as a Companion. 5.55—Weather for Farmers.
6.0—*Elementary English Lesson.*
6.35—See *Vienna.* 7.30—See *Heilsberg.* 9.15—Weather, News and Sports Notes. 9.30 (approx.)—Dance Music from *Berlin* (*Witzleben*). 11.30 (approx.)—Close Down.

BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW.
Transmits at intervals from 5.30 a.m. (Gymnastics and Concert).
3.5 *p.m.*—*Orchestral Concert,* conducted by Bruno Seidler-Winkler. Overture, Easter (Rimsky-Korsakoff). Symphonic Poem in the Form of Variations, Frühling (Weingartner). Scherzo-Caprice (Nedbal). Four Landscapes from "Faust II" (Unger): (*a*) Arkadien, (*b*) Trüber Tag, (*c*) Frühling und Jugend, (*d*) Die Felsenburg. Overture, "L'amore medico" (Wolf-Ferrari). Aschenputtel-Suite (d'Albert). Ballet égyptien (Luigini). Two Military Marches (Blech). In the interval—Film Notes.
5.0—The Narrative of the Week.
5.30—*Song Recital by Hermann Schey* (*Baritone*). Songs (Beethoven): (*a*) Ich liebe dich, (*b*) Mailied, (*c*) Neue Liebe, neues Leben. Songs (H. Wolf): (*a*) Kophtisches Lied, (*b*) Anakreon, (*c*) Tambour, (*d*) Der Schreckenberger. 5.55—"The Witzleben Station informs its Listeners . . ." 6.0—Topical Talk. 6.10—Talk on Architectual Questions. 6.20—Chess Lesson.
6.35—See *Vienna.* 7.30—See *Heilsberg.* 9.15—Weather, News and Sports Notes. 9.30 (approx.)—Dance Music from the Europa Pavilion. 11.30 (approx.)—Close Down.

BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW.
12.45 *p.m.*—Septet Concert. In the interval—News Bulletin. 1.50—Exchange Quotations. 2.0—Popular Music on Gramophone Records. 4.0—Concert relayed from *Paris* (*Ecole Sup rieure*), 671 kc/s (447.1 m.). 5.0—Pasdeloup Symphony Concert relayed from the Théâtre des Champs Elysées, *Paris.* 6.30—Radio Journal. 8.0—News, Exchange and Lottery Results. 8.5—Sports Notes. 8.10—*Advanced English Lesson.* 8.25—News and Weather Forecast. 8.30—Concert of Popular Music on Gramophone Records. 9.0—Sponsored Programme.
9.30—"*The Workers*"—Drama in One Act in Verse (Eugène Manuel). After the programme—Amusement Guide and Time Signal.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by *Gleiwitz,* 1,184 kc/s (253 m.).
Transmits at intervals from 5.30 a.m.
3.30 *p.m.*—Concert by the Berlin Station Orchestra, relayed from *Berlin* (*Witzleben*). 5.0—"The Age in Modern Poetry." 5.25—Weather for Farmers.
5.27—*Orchestral Concert,* conducted by Franz Marszalek. Soloist: Kurt Becker ('Cello). Overture, "Die schöne Galathee" (Suppé). Spanish Suite for 'Cello (Albeniz): (*a*) Harlequin, (*b*) Butterfly, (*c*) Two Masked Ball Scenes. Ninna Nanna (de Micheli). The Old Musical Clock (Humphries). Mazurka (Grünfeld). Waltz, Nordseebilder (Johann Strauss). March, Auf treue Kameradschaft (Blankenburg).
6.30—Weather for Farmers and Topical Talk. 7.0—See *Heilsberg.*

9.25—Time and News. 9.50—Dance Music. 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.
12.15—1.45 *p.m.*—Weather and *Gramophone Records*. Selection in Italian from "La Traviata" (Verdi) 5.0—Orchestral Concert from the Hotel Atlanta. 6.15—Illustrated Talk.
6.30—*Gramophone Records*. Overture, "Banditenstreiche" (Suppé). Selection from "Le Bourgeois Gentilhomme" (Richard Strauss). 7.15—Talk: The History of Sculpture in Belgium. 7.30—Literary Review.
8.0—Orchestral Concert conducted by Jean Kumps. Soloist: Mme. E. Ervan (Soprano). Overture, "Tannhäuser" (Wagner). Songs from (*a*) "Xerxes" (Händel) (*b*) "Orpheus" (Gluck). Symphony No. 8 (Beethoven). 8.45—Literature dedicated to April—Readings from the Works of Rémy Belleau, Henri de Régnier, Jean Richepin, and Pierre Mac Orlan.
9.0—*Concert (continued)*. España (Chabrier). Jazz Music (Poot). Songs: (*a*) Le son des Cloches, and (*b*) Ronde (Kumps), (*c*) Les petits ânes (Rasse), (*d*) A Swan (Grieg), (*e*) Mailied (Schumann), (*f*) Le Coeur de ma Mie (Dalcroze). Selections (Ravel): (*a*) Pavane pour une Infante défunte, (*b*) Minuet. Rhapsody (Jongen). 10.0—Le Journal Parlé.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.
12.15—1.45 *p.m.*—Weather Forecast and *Light Music on Gramophone Records*. Curly. Dans le Bar des lutins travailleurs. Selection from "Countess Maritza" (Kálmán). Cinderella's Wedding Procession. Retraite aux Flambeaux du Roi des Grenouilles. Italian Caprice (Tchaikovsky). Polonaise from "Eugen Onegin" (Tchaikovsky). The Cathedral Bells. The Clock and the Dresden Figures (Ketelbey). Two Polkas. Non piu lacrime. No mas lacrimas. Waltz (Van Herck). Mazurka (Van Herck). Caro mio ben (Giordano). Ave Maria (Gounod). A Happy Christmas. Tango (Albeniz-Kreisler). Spanish Dance from "La Vida breve" (Falla-Kreisler). Valse brillante in E Flat (Chopin). Valse capricieuse (Rubinstein). March of the Little Tin Soldiers (Pierné).
5.0—*Popular Music on Gramophone Records*. Symphony in D Minor (César Franck). Don Juan (Richard Strauss). Ballad in G Minor (Chopin). Second Symphonic Suite, Daphnis et Chloé (Ravel). 6.15—Talk: A Trip through Algeria.
6.30—*Gramophone Concert*. Beaux Yeux. Romanian Dance. La Cantalouse (from Auvergne). La Grando (from Auvergne). Chanson bohémienne (Boldi). Krakoviak (from Poland). Cossack Dance. Neapolitan Tarantella (Rossini). Italian Waltz (Arditi). The Volga Boat Song. Ow'Schodor Godol (Sulzer). Enosch K'Chozir Jomow (Levandovsky). Le Chant du Gille. Spanish March, Granada (Garcia).
7.15—Talk on Wireless Disturbances.
7.30—Le Journal Parlé.
8.0—"The Valkyries"—Opera (Wagner), relayed from the Royal Flemish Opera House, *Antwerp*. In the first interval—Talk. In the second interval—Le Journal Parlé.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW.
11.0 *a.m.*—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 *noon*—Popular Music on Gramophone Records.
3.0 *p.m.*—Programme for Schools.
4.0—Light Music and Romanian Music by the Sibiceano Orchestra.
5.0—News and Time Signal. 5.10—Concert (continued). 6.0—Talk on History, Geography and Tourism.
6.40—"Manon"—Opera (Massenet) on Gramophone Records. In the interval, News Bulletin.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW. Programme also relayed on 210 metres from 6.40—11 p.m.
8.15 *a.m.*—Concert by the Weidinger Orchestra. 10.10—Tidal Report.
11.0—Chimes.
11.5—*Concert by the Station Quintet*. A Night in Madrid (Glinka). Courante (Glazounoff). Intermezzo (Mendelssohn). Nocturne (Hubay). Scherzo from the Pianoforte Trio (Radnai). Waltz (Schubert). Barcarolle and Sicilienne (Rossini). Cortège catalan (de Séry).
3.0—Programme for Children. 4.0—Missionary Report. **4.30—Recital of Hungarian Folk Music and Songs** by the Karl Bura Cigány Band. Soloist: Izabella Nagy (Vocalist).
5.30—Talk: Ottokar Prohászka. 6.0—Answers to Correspondents.
6.40—*Pianoforte Recital* by Irene Marik. Legende (Liszt). Ballad in F Minor (Chopin). Seguidillas (Albéniz). Selections (Fall). 7.15—Review of Foreign Affairs.
7.30—"The Growth of the Operetta" IV. Lecocq. Concert by the Royal Hungarian Opera House Orchestra, conducted by Béla Nagypál. Soloists: Gitta Halász and Andreas Rösler. Selections from "La fille de Madame Angot." Selections from "Girofié-Girofla." Selections from "Le Jour et la Nuit." After the Concert, Recital by the Nándor Soyánka Cigány Band from the Café Baross.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,319 kc/s (227 m.); 1.5 kW.
See *Langenberg*.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relayed by *Kalundborg*, 260 kc/s (1,153 m.).
6.30 *a.m.*—Morning Gymnastics. 7.30—Divine Service from the Cathedral. 10.0—Weather Forecast. 10.10—Angling Notes. 10.15—Talk for Schools. 11.0—Time and Chimes from the Town Hall. 11.2—String Ensemble Concert from the Wivex Restaurant. 1.0—1.30 *p.m.*—No Transmission. 1.30—Gramophone Records of Light Music. 2.0—Programme for Children.
2.30—*Orchestral Concert*, conducted by Launy Gröndahl. Soloist: Ebba Nissen (Violin). Chinese March, Kwang Hsu (Lincke). Overture, "Eurydice paa Tartarus" (Kuhlau). Russian Minuet (Akimenko). Two Danish Folk Melodies, arranged for Strings by O. Gyldmark. Selection from "The Merry Wives of Windsor" (Nicolai). March (Fucik). Violin Solos: (*a*) Humoresque (Aulin). (*b*) Barcarolle (Wachtmeister), (*c*) Souvenir de Moscou (Wieniavsky). Overture, "Semiramis" (Rossini). Selections (Moszkovsky): (*a*) Serenade, (*b*) Guitarre. Selection from "Bluebeard" (Offenbach). Two Pieces from "Sommerfugle" (Andersen). Radio March (Pecking).
4.40—Exchange and Fish Market Notes. 4.50—Greenland Programme. Talk. 5.20—French Lesson. 5.50—Weather Forecast.
6.0—News Bulletin. 6.15—Time Signal. 6.30—Agricultural Talk. 7.0—Town Hall Chimes.
7.2—*Sousa Music by the Station Orchestra*, conducted by Emil Reesen: Marches. The Washington Post. King Cotton. Fairest of the Fair. El Capitan. The Stars and Stripes for Ever.
7.20—Reading. 7.40—Danish Song Recital by Ely Fischer Kjerulf.
8.0—Programme by Per Knutzon.
8.10—Quartet Concert, by Ejner Jensen (Tenor), Svend Hageltorn (Tenor), Georg Leicht (Bass) and Holger Harder (Bass).
8.25—"*Pictures of Copenhagen*": Monologues and Musical Selections by Kai Rosenberg (Recitations) and the Instrumental Ensemble, conducted by Emil Reesen. Words and Music by Kai Rosenberg. 8.55—News Bulletin.
9.10—*Orchestral Concert*, conducted by Emil Reesen. Overture, "Jean de Paris" (Boieldieu). Waltz from "Der Rosenkavalier" (R. Strauss). Two Pieces for Strings (Grieg): (*a*) Herzwunden, (*b*) Letzter Frühling. Farandola from the Second Suite to "L'Arlésienne" (Bizet). Serenade (Gounod). Waltz and Polonaise from "Eugen Onegin" (Tchaikovsky).
10.0—Dance Music from the Lodberg Restaurant. In the interval at 11.0—Time and Chimes from the Town Hall. 11.15 (approx.)—Close Down.

CRACOW (Poland)

959 kc/s (312.8 m.) 1.5 kW.
10.45 *a.m.*—Press Review. 10.58—Time Signal, Bugle Call from St. Mary's Church, and Programme Announcements. 11.10—See *Lwów*.
11.45—Light Music on Gramophone Records.
12.10 *p.m.*—Weather and Economic Report. 2.15—See *Warsaw*. 2.45—Shipping and Fishing Notes. 2.50—Talk for Hospitals. 3.20—See *Warsaw*. 3.40—Light Music on Gramophone Records.
4.0—Divine Service from the Ostro Brama, *Wilno*. 5.0—See *Lwów*. 5.30—See *Warsaw*. 5.50—Miscellaneous Items and News. 6.0—Review of

SATURDAY
continued

Foreign Politics. 6.15—Agricultural Report. 6.25—Programme Announcements.
6.35—See *Vienna*. 8.35—See *Warsaw*. 9.10—Chopin Concert. 9.40—See *Warsaw*. 9.55—Light Music and Dance Music. 11.0 (approx.)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by *Cork*, 1,337 kc/s (224.4 m.).
1.30 *p.m.*—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records. 2.0—6.0—Interval. 7.20—News Bulletin. 7.30—Time Signal. 7.31—Gaedhilg. 7.45—Talk on Opera.
8.0—"La Boheme"—Opera (Puccini), by the Augmented Station Orchestra, the Station Opera Chorus and Principals. Conductor: Mr. Vincent O'Brien. 10.30—Time Signal, News and Weather Forecast. 10.40—Weekly Sports Review and Close Down.

FÉCAMP (France)

Radio Normandie. 1,364 kc/s (219.9 m.); 1 kW.
Transmits at intervals from 12 noon.
7.30 *p.m.*—Local News. 7.45—Announcements. 8.0—Sponsored Concert. 8.45—News Bulletin. 9.0—Gramophone Concert of Light Music.
12 *midnight*—Variety Programme.
3.0 *a.m.* (*Sunday*)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by *Cassel*, 1,220 kc/s (246 m.).
Transmits at intervals from 5.15 a.m.
11.0 *a.m.*—Time and Economic Notes
11.5—Concert from *Berlin* (*Witzleben*). 11.40—News, Weather and Programme Notes. 11.55—Nauen Time Signal. 12.50 *p.m.*—News Bulletin. 1.0—Sponsored Gramophone Concert. 1.45—Weather Report. 2.5—Time and Economic Notes. 2.15—See *Stuttgart*. 3.55—Economic Notes.
4.5—See *Stuttgart*. 5.30—Economic Notes. 5.40—Talk: Cardinal Paccelli. 6.5—Talk arranged by the Frankfurter Zeitung. 6.30—Time, Programme Announcements, Weather and Economic Notes. 6.35—Talk on the Fundamental Principles of Music.
7.5—See *Stuttgart*. 9.15—Time, Weather, News and Sports Notes. 9.35—See *Stuttgart*. 11.0 (approx.)—Close Down.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hanover*, 530 kc/s (566 m.) and *Kiel*, 1,292 kc/s (232.2 m.).
Transmits at intervals from 5.30 a.m. (Weather and Concert).
10.0 *a.m.* (from *Kiel*)—*Quintet Concert*, conducted by Hans Döring. Overture, "Lucio Silla" (Mozart). Russian Sketches (Dreyer). Russian Romance (Kostal). Fantastic Waltz (Heinecke). Karawanen-Zug (Krüger). Valse charmante (Bossi). Chinese Melodies (Zehle). Waltz, Hoch lebe der Tanz (Waldteufel). In the interval at 11.10—Time, Weather and Winter Sports Notes. 11.20—Exchange Quotations.
11.30 (from *Bremen*).—*Concert by the Little String Orchestra*, conducted by Reinhold Krug. Overture, "Waldmeister" (Joh. Strauss). Springtanz (Grieg). Les Fleurs (Waldteufel). Romance in E Flat Major (Rubinstein). Fantasia on Adam's Opera Music (Urbach). Violin Solo by Josef Schöberl: Ein Ländler (Pachernegg). Selection from "Der Waffenschmied" (Lortzing). Quadrille from "Der Opernball" (Heuberger).
12.15 *p.m.*—Sponsored Programme. 1.0—Ice Report and News. 2.0—Weather Report. 2.5—Exchange Quotations. 2.35—Shipping News.
3.0—Orchestral Concert, conducted by José Eibenschütz. Overture, Carnival (Dvorák). Serenade for Strings (Haydn). Heiteres Spiel (Blumer). Polka from "La Vie Parisienne" (Offenbach). Valse caprice (Rubinstein). Humoresque, Fasching (Weiner). Wonnetraum (Meyer-Helmund). Indian Ballet from "Lakmé" (Delibes). Selection from "The Geisha" (Jones). Waltz from "Waldmeister" (Joh. Strauss). Selection from "Eva" (Lehár).
4.30—Relay from the Gewerbehaus. 5.15 (from *Bremen*)—Variety Programme with Songs to the Lute by Ernst Duis. 6.10—Weather Report.
6.15—"Les Précieuses Ridicules"—Comedy in One Act (Molière).
7.0—See *Heilsberg*. 9.0—News Bulletin. 9.20—Topical Talk. 9.30 (from *Bremen*)—Folk Music of Lower Saxony.
10.0—Dance Music by the Scarpa Orchestra, with the First Performance of the Paraphrase on the Norag March by Horst Platen, arranged by Georg Hentschel. 10.20 (in the interval)—Ice Report.

HEILSBERG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relayed by *Danzig*, 662 kc/s (453.2 m.).
Transmits at intervals from 5.30 a.m. (Gymnastics and Gramophone Concert.)
11.0 *a.m.*—Gramophone Concert of Light Music. 12.20 *p.m.*—News Bulletin.
12.30—*Orchestral Concert by the Tschertok Band*. Waltz from "Der Rosenkavalier" (Richard Strauss). Dornröschens Brautfahrt (Rhode). Selection from "The Land of Smiles" (Lehar). Tango darf dir keine Blumen schenken (Michaeloff). Waltz, Tausend bildschöne Frauen (Furs-Michaeloff). Heinzelmännchens Wachtparade (Noack).
2.45 (from *Danzig*)—Handwork for Children.
3.15—*Orchestral Concert* conducted by Felix Prawniczak. March, Adlerflug (Blankenburg). Waltz from "Frühlingsluft" (O. Straus). Military Fanfare (Ascher). Erinnerungen an Franz Abt (Mannfred). March, Von Welle zu Welle (Senger). March, Jedem das Seine (Schwittmann). Chinese Wedding Dance (Lindemann). Selection from "The Geisha" (Jones). Selections (Abraham): (*a*) My Golden Baby, (*b*) Song from "The Flower of Hawaii." Hensel-Marsch (Woehlert). In the interval at 4.0 (from *Danzig*)—Talk on Films.
4.45—Talk: The Exhibition in Königsberg Castle. 5.0—Programme Announcements. 5.10—Programme Announcements in Esperanto. 5.15—Ice Report and Agricultural Prices. 5.25—World Market Report. 5.35—Talk: The Negro Problem in the U.S.A.
6.5—"Cotton and Petroleum" (B. Travers) with Gramophone Records. 6.40—Talk: Wit of Yesterday and To-day. 6.55—Weather Report.
7.0—Variety Programme in Aid of the Winter Relief Fund relayed from the Town Hall. 9.20 (approx.)—Weather, News and Sports Notes.

HILVERSUM (Holland)

1,004 kc/s (298.8 m.); 8.5 kW.
6.25—9.40 *a.m.*—Programme of the Workers' Radio Society (V.A.R.A.). 6.25—6.40 and 7.10—7.25—Gymnastics. 7.40—Gramophone Records of Variety Music. 8.40—Trio Concert and Gramophone Records of Light Music.
9.40—Programme of the Liberal Protestant Radio Society (V.P.R.O.). Religious Transmission.
9.55 till Close Down—V.A.R.A. Programme. 9.55—*Programme for Workers*: Trio Selections, Gramophone Records of Light Music and a Dramatic Programme.
11.40—*Septet Concert*. March, Adlerflug (Blankenburg) Waltz, Tesoro mio (Becucci). Serenade (Tarenghi). Gramophone Records of Light Music. Potpourri, Das Beste vom Besten (Dostal). The Butterfly Waltz (Friml). Gramophone Records of Variety Music. Potpourri, Haydns Himmelgrüsse (Urbach). Largo (Haydn). Gramophone Records of Light Music. Waltz, Man lacht, man lebt, man leibt (Gilbert). Waltz, Ja so ein Liebespaar (Gilbert). March, Sei mein Kamerad (Gilbert). Gramophone Records of Popular Music. Selection from "Tannhäuser" (Wagner-Alder). Spanish March, Reboleras (Ladivia-Lyvas).
1.25—1.55 *p.m.*—Interval. 1.55—Educational Talk. 2.10—Concert by a Children's Choir. 2.40—Talk. 2.55—Gramophone Records of Light Music.
3.10—"The Madman with the Hatchet"—Play (Eduard Reinacher).
4.10—*Accordion Concert*. Potpourri, Für Alle (Dostal). Gramophone Records of Light Music. Overture, "Si j'étais Roi" (Adam). March of the K.L.M. (Schootemeyer).
4.40—Sports Talk.
4.55—*Chamber Music*. Andante for Violin and Pianoforte (Bach). Sonata No. 1 in A for Violin and Pianoforte (Händel).
5.25—Review of the Week. 5.40—Groningen Programme: Literary and Musical Selections. 6.40—*Concert by a Balaloika Orchestra, a Choir and M. Wischnevsky (Tenor)*. Potpourri of Russian Songs (Michailovsky). Andante Cantabile from the String Quartet (Tchaikovsky). Mazurka No. 5 (Wieniavsky). Humoresque (Dvorak). Three Songs. Two Russian Melodies. Variations on a Russian Folk Song. Memories of the Renz Circus (Peter). Choral Selections: (*a*) Popular Ukrainian Songs (Doubatoff), (*b*) Ach du meine breite Steppe (Triodin). Tenor Solos. 7.40—Programme to be announced.
8.40—Variety Programme. The Orchestra conducted by Hugo de Groot. Soloists: Mlle Stella Seemer (Vocalist), Willem Ciere (Pianoforte), The Two Hodlars (Accordionists), and Mlle Elize de Haas (Vocalist). Talk by Kees Pruis.. Dramatic Selections. 10.40 (in the interval)—News. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

160 kc/s (1,875 m.); 8.5 kW.
Programme of the Catholic Radio Society (K.R.O.). 7.40—8.55 *a.m.*—Variety Music on Gramophone Records.
9.40—*Trio Concert conducted by Piet Lustenhouwer*. Selection (Erwin Strauss). English Waltz (Gilbert), Ballet Music from "Frau Luna" (Lincke). Troubadour's Serenade (Amadei). Selection from "Les Cloches de Corneville" (Planquette). The Little Pagoda (Siede). Potpourri, Das Beste vom Besten (Dostal). Es war 'mal ein Zigeuner (Eineg). Romantic Waltz (Heinecke) Two Songs from "Die grosse Liebe" (Landauer).
1.40—Variety Music on Gramophone Records. 2.10—Programme for Children. 3.40—Programme arranged by the H.I.R.O. 4.40—Popular Music on Gramophone Records. 4.55—Sports Notes. 5.10—Variety Music on Gramophone Records. 5.40—Press Review. 6.0—Variety Music on Gramophone Records. 6.20—Esperanto Lesson. 6.50—Talk by Heer van Eggermont. 7.10—Police Notes. 7.25—Popular Music on Gramophone Records.
7.40—Cabaret Programme. Louis Noiret (Songs). Willy Corsari (Songs), and the Three Hawkcourts (Accordionists). 10.40—Variety Music on Gramophone Records. 11.40 (approx.)—Close Down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.
See *Copenhagen*.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Relayed by *Aachen*, *Cologne* and *Münster*, 1,319 kc/s (227 m.).
Transmits at intervals from 5.45 a.m. (Exercises, Weather, Time and Concert).
10.20 *a.m.*—Concert from *Berlin* (*Witzleben*). 11.50—Weather Report, News and Time Signal.
12 *noon*—*Orchestral Concert*, conducted by Wolf. March, Stets zielbewusst (Blankenburg). Märchen-Walzer (Mandt). Jübel-Ouvertüre (Chr. Bach). Selections from "Cavalleria rusticana" (Mascagni). Ballet des parfums (Popy). Song, Verbotener Gesang (Gastaldon). Torch Dance No. 1 (Meyerbeer).
1.35 *p.m.*—Weekend Concert. 2.30—Economic Notes and Time Signal. 2.50—Programme for Children. 3.20—Talk for Women: Modern Women in Ancient Egypt. 3.40—*English Lesson*.
4.0—Orchestral Concert. 5.15—Talk: Trips in the Rhineland and Westphalia: Reminiscences of the Westerwald. 5.40—Talk on Modern Traffic Problems: The Radio Service and Weather Report in Aerial Transport. 6.0—Weather Report, Time Signal, Economic Notes and Sports Report. 6.15—Wireless Notes. 6.30—Astronomical Talk. 6.55—First News Bulletin.
7.0—Musical Potpourri, relayed from Gladbach. The Augmented Station Orchestra, conducted by Buschkötter and Kühn. The Small Station Orchestra, conducted by Eysoldt. The Station Choir, conducted by Zimmermann. Soloists: Hansen and Neumann-Knapp (Sopranos), Guermanova (Contralto), Aramesco (Tenor), Wocke (Baritone), Strienz (Bass), Mittmann and Schneiderhan (Violins), Feldin ('Cello), and Egbert Grape (Pianoforte). After the Concert, News, Sports Notes and Dance Music from the Europa Pavilion, *Berlin*. 11.30—Gramophone Records of Famous Dance Bands. 12 *midnight* (approx.)—Close Down.

LEIPZIG (Germany)

1,157 kc/s (259 m.); 2 kW. Relayed by *Dresden*, 941 kc/s (319 m.).
Transmits at intervals from 5.30 a.m (*Witzleben* Relay).
4.0 *p.m.*—*Concert by the Leipzig Symphony Orchestra, conducted by*

SATURDAY continued

Hilmar Weber. Festival Polonaise in E Major, Op. 12 (Svensden). Intermezzo from "Mona Lisa" (Schillings). Ponchielli Potpourri (Urbach). Hungarian Rhapsody in D Major (Reindl). Selection from "Das Pensionat" (Suppé). Waltz, Wiener Extrablätter (Translateur). (Selection from "Eine einzige Nacht" (Stolz). 5.30—German Lesson. 5.50—A Radio Dictionary of Modern Words. 6.0—Talk: Music and Acoustics. 6.30—Erwin Eckersberg Programme.
7.0—Concert from Vienna.
7.30—See *Heilsberg*. 9.15—News Bulletin, followed by Dance Music from *Berlin* (*Witzleben*). 11.0 (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

522 kc/s (574.7 m.); 2.5 kW.
11.15 *a.m.*—Light Music on Gramophone Records. 11.45—News Bulletin. 12 *noon*—Time and Light Music on Gramophone Records.
4.30 *p.m.*—Orchestral Concert. 5.0—Humorous Reading. 5.30—Gymnastic Course. 6.0—*English Lesson*. 6.30—Humorous Programme. 7.0—Relay of a Jadranska Traza Programme. 9.0—Time and News Bulletin. 9.15—Light Music.

LWÓW (Poland)

788 kc/s (381 m.); 16 kW.
10.45 *a.m.*—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.10—Educational Programme. 11.45—Light Music on Gramophone Records.
12.10 *p.m.*—See *Warsaw*. 2.0—Popular Music on Gramophone Records. 2.15—See *Warsaw*. 2.25—A Gramophone Record. 2.30—Talk: The Secret of the Pyramids. 2.45—See *Warsaw*. 3.40—Light Music on Gramophone Records and Topical Talk. 4.0—Programme to be announced. 5.5—A Play for Children. 5.30—Pianoforte Recital. 5.50—Miscellaneous Items. 6.15—See *Warsaw*. 6.25—Light Music on Gramophone Records.
6.35—See *Vienna*. 8.35—See *Warsaw*. 9.50—Talk: Wireless in the West. 10.5—Relay of Foreign Stations. 11.0 (approx.)—Close Down.

LYONS (France)

La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW.
8.0 *a.m.*—Relay from *Paris* (*Ecole Supérieure*), 671 kc/s (447.1 m.). 10.0—Orchestral Concert.
1.0 *p.m.*—Concert by the Station Orchestra. 4.0—Instrumental Concert. 5.0—Pasdeloup Concert. 7.0—Orchestral Concert. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Concert of Classical Music conducted by Raoul Barthalay.

MADRID (Spain)

Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kW.
8.0—9.0 *a.m.*—Topical Review. 11.45—Astronomical Report and Culinary Talk. 12 *noon*—Chimes, Announcements, Labour Market Report and Programme Announcements. 12.15 *p.m.*—Time Signal and Interval.
2.0—Chimes, Time Signal, Weather Forecast, Theatre Guide and *Concert by the Station Sextet*. Overture, "Euryanthe" (Weber). Selections (Chapuis). Selection from "Coppélia" (Delibes). Suite Bergamasque (Debussy). Talk on Books. Selection from "Goyescas" (Granados). Andalusian Scenes (Breton).
3.20—News and Radio Journal. 3.30—Interval. 7.0—Chimes Shipping Report and Exchange Quotations, followed by Concert of Request Gramophone Records. 8.15—Interval. 9.0—French Lesson on Linguaphone Records.
9.30—Chimes, Time Signal and Selection from a Musical Comedy conducted by Jose Antonio Alvarez Cantos. 11.45—News and Radio Journal. 12 *midnight*—Chimes and Close Down.

MILAN (Italy)

Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.
See *Turin*.

MOSCOW (Russia)

Trades Union. 230.1 kc/s (1,304 m.); 100 kW.
Transmits at intervals from 4.0 a.m
7.0 *a.m.*—Programme for Children. 8.0—Proletariat Radio Journal. 8.55—Time Signal. 9.0—Concert for Workers. 10.0—Peasants' Radio Journal. 11.0—Literary Programme. 11.30—Literary Programme (contd.).
1.0 *p.m.*—Programme for Children. 1.45—Weather Forecast. 2.0—Shipping Report. 2.30—Talk (to be announced). 2.55—Time Signal. 3.0—Proletariat Radio Journal. 3.55—Peasants' Radio Journal. 5.0—Radio Appeal. 6.0—Relay from *Georgiewsk*. 7.0—Talk in German: Communal Economy. Talk in English; Proletarian Tourists. 7.55—Time Signal. 9.0 (approx.)—Close Down.

MUNICH (Germany)

563 kc/s (533 m.); 1.5 kW. Relayed by *Augsburg* and *Kaiserslautern*, 536 kc/s (560 m.), and *Nürnberg*, 1,256 kc/s (239 m.).
Transmits at intervals from 5.45 a.m
3.30 *p.m.* (from *Nürnberg*)—Concert by the Nürnberg Concert Society Orchestra, conducted by Schuster. 4.40—Programme for Girls. 5.10—*Organ Recital* by Josef Meszner. Passacaglia (Muffat). Improvisations on a Theme by Bruckner (Meszner). 5.35—Concert by the Schweinfurt Folk Choir, relayed from *Schweinfurt*. 6.5—Wireless Notes. 6.20—Talk: Emigration to the South East. 6.40—Wireless Notes. 7.0—"Salvator" Evening.
8.30—*Concert by the Wireless Orchestra, conducted by Karl List*. Old Bernese March. Overture, "Edelweiss" (Komzák). Emperor Waltz (Johann Strauss). Mazurka and Krakovia from "His Life for the Czar" (Glinka). Selection from "The Mikado," (Sullivan). Waltz, Nachtschwärmer (Ziehrer). Paraphrase on "La Paloma" (Weninger). Tivoli March (Schmiedecke).
9.20—Time, Weather, News and Sports Notes. 9.45—Dance Music from *Stuttgart*. 11.0 (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by *Fredriksstad*, 816 kc/s (367.6 m.); *Hamar*, 536 kc/s (560 m.); *Notodden*, 671 kc/s (447.1 m.) *Porsgrund*, 662 kc/s (453.2 m.), and *Rjukan*, 671 kc/s (447.1 m.).
Transmits at intervals from 10.10 a.m.
3.30 *p.m.*—Orchestral Concert, relayed from the Cecil Restaurant. 4.15—Programme for Children. 5.15—Recital of National Music. 5.45—Talk: Technique and Science. 6.0—Announcements, Weather and News.
6.30—Talk (to be announced). 7.0—Time Signal.
7.1—Concert by the Station Orchestra. Soloist: Mme. Karin Edelberg. 8.15—Readings by Fridtjof Krohn. 8.40—Weather and News Bulletin. 9.0—Topical Talk. 9.15—Songs and Review of the Week. 9.45—Dance Music relayed from the Moulin Rouge. 11.0 (approx.)—Close Down.

PALERMO (Italy)

Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW.
11.45 *a.m.*—Giornale Radio. 12 *noon*—Dance Music. In the interval, Time Signal, Announcements and Weather Forecast. 4.30—*p.m.*—Light Music on Gramophone Records. 5.0—Programme for Children. 7.0—Giornale dell'Enit, Agricultural Report and Giornale Radio. 7.20—French Lesson on Gramophone Records. 7.25—Sports Notes. 7.45—Time Signal and Announcements.
7.50—"Les Saltimbanques"—Operetta (Ganne). In the interval, Book Review and Announcements. 9.55—News Bulletin.

PARIS (France)

Eiffel Tower (FLE) 207.5 kc/s (1,445.7 m.); 13 kW.
5.45 *p.m.*—Le Journal Parlé. 7.20—Weather Forecast. 7.30—"*The Last Days of Pompeii*" (Bulwer Lytton) adapted as a Radio Play by Rémy Vallin.

PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 1.2 kW.
12 *noon*—Gramophone Records, News and Announcements. 12.15 *p.m.*—Variety Music on Gramophone Records. 1.45—News and Announcements. 2.0—6.45—Interval. 6.45—News and Announcements. 7.0—Popular Music on Gramophone Records, Talks and News. 7.30—Light Music on Gramophone Records. 8.30—Gramophone Records. Talks and News.
8.45—*Vocal and Orchestral Concert*. Overture, "Patrie" (Bizet). Romance sans Paroles for 'Cello and Orchestra (Fauré). Suite, In Modo Populari (Cui). Rondes de Printemps from "Images" (Debussy). Orchestral Suite, España (Albeniz). Ballet Music from "Les Hérétiques" (Levadé). Novelty Foxtrot, Chicken Pie (Doucet). The Flight of the Bumble-Bee (Rimsky-Korsakoff). Piedmontese Dance No. 2 (Sinigaglia).
10.45—News Bulletin. 10.40 (approx.)—Close Down.

PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.
6.45 *a.m.*—Physical Culture Lesson. 7.30—Weather and Physical Culture (continued). 7.45—Variety Music on Gramophone Records. 8.0—News, Weather and Press Review.
12.30 *p.m.*—*Concert*. [Qu'est-ce que j'ai donc (Forrester). My Blue Heaven (Donaldson). Selection from "Good News" (Sylva-Brown-Henderson). Joyeux retour (Avignon). That's You, Baby (Mitchell). Selection from "Si" (Yvain). Duet: I ask nothing more. Suzanne (Miraski). Waltz, Dorfschwalben aus Oesterreich (Johann Strauss). Selection from "The Desert Song." (Romberg). Honolulu. Singing in the Rain (Brown). You know (Walter-Ervause). Hawaii, Inch! Allah (Padilla). Ça c'est Paris (Padilla). In the intervals, at 1.0—Exchange, News and Weather, and at 1.30 and 2.0—Exchange.
3.0—Programme for Children. 3.45—Exchange and Market Prices. 6.30—Market Prices, Weather, Agricultural Report and Racing Results. 7.0—Talk arranged by the Union des Grandes Associations Françaises. 7.10.—Talk.
7.30—Gramophone Concert of Variety Music. 7.45—Latin Press Review. Commercial Prices and News. 8.0—Reading. 8.30—News, Sports Notes and Weather. 8.40—Review by Jean Rieux. 8.45—**Programme of Songs and Poems** presented by Hugues Delorme. 9.15—Press Review and News.
10.0—Ballet Music from "Le Cid" (Massenet) on Gramophone Records.

RABAT (Morocco)

721.1 kc/s (416 m.); 2.5 kW.
12.30—2.0 *p.m.*—Le Journal Parlé, followed by *Concert, conducted by Louis Roche*. March (Razigade). Waltz (Pouget-Chantrier). Overture, "La Dame blanche" (Boieldieu-Salabert). Song. Quintet (C. Franck). Selections from "La Fête chez Thérèse" (Hahn-Mouton): (*a*) Contredanse des grisettes, (*b*) Valse de Mimi Pinson, (*c*) Danse

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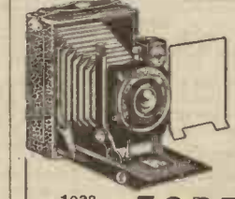

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violente. Dance (Baltazart-Legris). Song. Selection from "Surcouf" (Planquette-Hubans). Onestep, Summer (Roche).
4.0—5.0—Gramophone Records of Variety Music. 7.0—Arab Transmission: Talk, Le Journal Parlé and Popular Music on Gramophone Records. 7.45—Weather and Announcements.
8.0—*Concert*. Selection from "François les bas-bleus" (Messager-Tavan). Vilja's Song from "The Merry Widow" (Lehar). Selection from "The Pink Lady" (Caryll-Salabert). Song from "The Desert Song" (Romberg). Selection from "Le Petit Duc" (Lecocq-Tavan). Indian Love Call from "Rose Marie" (Friml-Stothart). Selection from "The Bayadere" (Kálmán).
9.0—Talk 9.10—Variety Music on Gramophone Records.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; *Lausanne*, 442 kc/s (680 m.), and *Geneva*, 395 kc/s (760 m.).
Transmits at intervals from 11.30 a.m. 11.30 *a.m.*—Time Signal from *Neuchâtel* Observatory. 11.32—Weather and News. 11.40 (from *Lausanne*)—Light Music on Gramophone Records. 12 *noon*—Exchange Quotations. 12.5 *p.m.*—Gramophone Concert (contd.). 1.0—3.30—Interval. 3.30—Time Signal from *Neuchâtel* Observatory. 3.31 (from *Geneva*)—Concert by the Station Quintet. 4.30 (from *Lausanne*)—Dance Music. 5.0 (from *Geneva*)—Book Review. 5.30 (from *Lausanne*)—Concert of Light Music on Gramophone Records. 6.0—Weather Report. 6.1 (from *Lausanne*)—Talk: The Week in International Politics.
6.30 (from Lausanne)—Offenbach Programme. Selections from Offenbach's Operettas on Gramophone Records, with Talk by Vincent Vincent. 7.45 (from *Lausanne*)—Variety Concert by the Station Orchestra. 9.0—Weather and News. 9.15 (from *Geneva*)—Dance Music relayed from the Moulin Rouge. 10.0 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW.
Transmits at intervals from 10.0 a.m. 5.0—French Lesson. 5.30—Agricultural Talk. 6.0—Weather Forecast. 6.5—Variety Programme. 8.0—Weather Forecast. 7.30—Dance Music. 10.0 (approx.)—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (1RO). 680 kc/s (441 m.); 50 kW. Relayed by *Naples*, 941 kc/s (319 m.), and 2RO, 3,750 kc/s (80 m.).
7.15—7.30 *a.m*—Giornale Radio and Announcements. 11.0—Gramophone Records of Variety Music. 11.35—Weather Forecast.
11.45—1.0 *p.m.*—*Vocal and Instrumental Concert* by the Station Sextet and Velia Capuano (Soprano). Soprano Solos: (*a*) So anch'io le virtù magiche (Donizetti), (*b*) Singing in the Rain (Brown), (*c*) La Folletta (Marchesi). Le baruffe trasteverine (Cardoni). Non piango più (Serra). Sous les tilleuls, from "Scènes alsaciennes" (Massenet). Selection from "Carmen" (Bizet). In Morocco (Marasizi). In the intervals at 12.15—Giornale Radio and Exchange and at 12.30—Time, Report of the Royal Geographical Society, Giornale Radio and Announcements. 4.15—Raading of a Short Story (Ugo Betti).
4.30—*Song Recital by Luciana Casalboro* (*Mezzo-Soprano*) *and Ofelia Parisini* (*Soprano*). La Lettre, from "Manon" (Massenet). Duet from the Second Act of "Aida" (Verdi).
4.45—*Variety Concert*. Selection from "The White Horse Inn" (Benatzky). Serenilla (Fragna). Overture, "La Fille de Madame Angot" (Lecocq). Valse tzigane (Dequin). Novelette (Bratton). Stra-Stra Stra (Mariotti).
5.15—Giornale dell'Enit. 5.55 (from *Naples*)—Shipping and Sports Notes. 6.0—Atmospheric Signals, Morse Lesson, Agricultural Notes, Weather, Giornale Radio and Press Review. 7.0—Time and Announcements. 7.5—Gramophone Records of Variety Music. 7.30—Sports Notes and Announcements.
7.45 (approx.)—Relay of an Opera from the San Carlo Theatre, *Naples*. In the intervals: Review of New Books and Talk. 9.55—News Bulletin.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 11.45 a.m. 9.0 *p.m.*—St. George's Organ Recital. 9.30—Phil Spitalny's Thé Dansante from *New York*. 9.45—Musical Ad Men. 10.15—"Skippy" from *New York*. 10.30—Blue Moon Cuckoos from *New York*. 10.45—Landt Trio from *New York*.
11.0—"Joe and Eddie." 11.15—Waldorf Orchestra from *New York*. 11.30—Time Signal. 11.31—American Trio. 11.45—Municipal Series. 12 *midnight* (WGY only)—Bernard Silberg ('Cellist).
12.15 *a.m.* (*Sunday*)—Laws that Safeguard Society from *New York*. 12.30—Prince Albert Quarter Hour from *New York*. 12.45—Trials of the Goldbergs from *New York*. 1.0—WGY Players. 1.30—National Advisory Council Programme from *New York*. 2.0—Goodyear Programme from *New York*. 2.30—Club Valspar from *New York*.
3.0—Lucky Strike Dance Hour from *New York*. 4.0—Jack Miles and his DeWitt Clinton Orchestra. 4.30—Rudy Vallee and his Connecticut Yankees from *New York*. 5.0—Ralph Kirbery (Baritone) from *New York*. 5.5—Coon-Sanders' Night Riders from *New York*. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BERO-MÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; *Basle*, 1,229 kc/s (244.1 m.); and *Berne*, 1,220 kc/s (246 m.).
11.28 *a.m.*—Time Signal from the Neuchâtel Observatory. 11.30—Weather and News. 11.40—Variety Concert on Gramophone Records.
1.0 *p.m.*—Weather and Exchange Quotations. 1.15—2.30—Interval. 2.30 (from *Zürich*)—Concert by Sigg's Accordion Sextet. 3.0—Music for Wind Instruments on Gramophone Records. 4.0 (from *Berne*)—Programme for Children 4.30—Weather and Market Prices. 4.45—5.30—Interval. 5.30—Variety Music on Gramophone Records. 6.0 (from *Zürich*)—Chimes. 6.15—(from *Zürich*)—Fashion Talk. 6.28—Time Signal and Weather. 6.30 (from *Zürich*)—Talk by Helene Lange.
7.0 (from Basle)—Ninth Symphony Concert by the Basle General Music Society, conducted by Felix Weingartner, relayed from the Musiksaal. 9.0—Weather and News. 9.15—Dance Music on Gramophone Records. 10.0 (approx.)—Close Down.

SEVILLE (Spain)

Call EAJ5. 815 kc/s (368.1 m.); 1.5 kW.
2.0—3.0 *p.m.*—*Concert*. Pasodoble Peñalver (Mendez). Song. Coqueta (Media-Villa). Selection from "Semiramis" (Rossini). Song, Blue River (Bryon). Student Song from "La ventura de Alcala" (Calleja and Luna). Tango, Cuando llora la milonga (Mario and Filiberto). Selection from "El amor brujo" (Falla). Flamenco Songs and Dances.
9.0—See *Madrid*. 12 *midnight* (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by *Boden*, 244 kc/s (1,229.5 m.); *Göteborg*, 932 kc/s (322 m.); *Hörby*, 1,166 kc/s (257 m.); *Motala*, 222.5 kc/s (1,348 m.); *Östersund*, 389 kc/s (770 m.) and *Sundsvall* 554 kc/s (542 m.).
Transmits at intervals from 6.20 a.m. 2.0 *p.m.*—Programme for the Opening of the Orebro Concert House. 3.10—Technical Talk. 3.30—Popular Music on Gramophone Records. 4.0 (in the interval)—Weather Report. 4.30—Programme for Children. 5.0—Radio Report from a Telephone Exchange.
5.30—Cabaret Programme. 6.15—Weather and News. 6.30—Talk: Correct Spelling. 7.0—Old Time Dance Music relayed from *Göteborg*.
7.45—Rural Programme relayed from Goteborg. 8.45—Weather and News. 9.0—Modern Dance Music from *Göteborg*. 10.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW.
11.30 *a.m.*—*Gramophone Concert*. Le Feston de l'Araignée (Roussel). Aria from "Galathée" (Masé). Aria from "Lakmé" (Delibes). Aria from "Mireille" (Gounod). Aria from "The Huguenots" (Meyerbeer). Selection from "Parsifal" (Wagner). Selections from "Sappho" (Gounod). Literary Selections: (*a*) Mimi Pinson (De Musset), (*b*) La Complainte du Fromage. Selection from "Les Noces de Jeannette" (Massé.)

SATURDAY
continued

Selection from "Véronique" (Messager). Literary Selections from (*a*) Cyrano de Bergerac (Rostand), (*b*) La Vierge à la Crèche (Clerici). Gipsy Romance (Boldi). Prelude No. 24 (Chopin). Liebesfreud (Kreisler). The Lark (Glinka). Waltz, Je t'aime (Waldteufel). Glow-Worm Idyll (Lincke). La Cloche des Morts (Ropartz). 12.45 *p.m.*—News in French and German. 1.0—Time Signal. 1.2—*Gramophone Concert*. Selection from "Carmen" (Bizet). Selection from "The Fair Maid of Perth" (Bizet). Selection from "The Barber of Seville" (Rossini). La voix des chênes (Goublier). Semailles (Goublier). Nocturne from "A Midsummer Night's Dream" (Mendelssohn). Selection from "La Traviata" (Verdi). Pourquoi as-tu pleuré (Rosen). In a little Pavillion (Klupsch). Selection (Fahrbach). Waltz, Morgenblätter (Johann Strauss). Kismet (Mackey). Love in Idleness (Macbeth). 2.0—Talk for Workers in French. 2.15—Gramophone Dance Music. Great Day. Visions of Yesterday. Marika. Cryin' for the Carolines. Like a Breath of Springtime. You will remember Vienna. I bring a love Song. The Standard of St. George. Blaze away. Betty co-ed. Blue again. The one man band. Choo-Choo. Un peu d'amour. Evensong. Oh Rosalita. Ten Cents a Dance.
3.45—Music Talk in French. 4.0—Gramophone Dance Music. 4.45—Wireless Talk in French.
5.0—*Dance Music*. March, Adieu mein kleine Garde-Offizier (Lincke). Foxtrot, Au revoir, pleasant Dreams. Slow Foxtrot, Just One More Chance. Fantastic Foxtrot. Waltz, Tango, Ladron. Foxtrot, H'llo Baby. Slow Foxtrot, Selection from "The Land of Smiles" (Lehár). Foxtrot, Baby's Birthday Party. Waltz, Eternelle ivresse (Ganne). Foxtrot, Ho Hum. Foxtrot, When I take my Sugar to Tea. Sound-Film Potpourri. Two Step, Morenita.
6.0—French Lesson. 6.15—Talk in French; Orchards.
6.30—*Concert conducted by Maurice de Villers*. Soloists: Mmes. Barzanges and de Vendeville. March from "The Damnation of Faust" (Berlioz). Overture, "Coriolanus" (Beethoven). Invitation to the Waltz (Weber). Duet, Le vieux sonneur (Lacosse). Selection from "I Pagliacci" (Leoncavallo). Serenade (Moszkovsky). Bolero from "Le Coeur et la Main" (Lecocq). Orchestral Suite, On the Volga (Dyck).
7.30—Time Signal. 7.32—News in French and German. 7.45—Gramophone Concert of Light Music.
8.30—Concert arranged by the Petite-Rosselie Radio Club, relayed from the Kuhner Hall, Cité Wendel. Programme by a Military Band, a Jazz Band and Soloists: Jacques Balout (Viola), and Mme. Georges Gut-Weber (Pianoforte). In the interval, Talk by Captain Moisson. 10.30—Dance Music. 12 *midnight* (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Suddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by *Freiberg*, 527 kc/s (570 m.).
Transmits at intervals from 5.15 a.m. (*Frankfurt* Relay).
11.0 *a.m.*—Weather and Snow Report. 11.5—Sponsored Concert.
11.35—*Gramophone Concert*. Overture, "Marinarella" (Fucik). Two Songs from "Rigoletto" (Verdi). Hungarian Dances, Nos. 5 and 6 (Brahms). April (di Lazarco-Cherubini). O sole mio (di Capua). Selections (Penna): (*a*) Oregon, (*b*) L'onna canta. Potpourri of Russian Folk Songs, Dubinuschka (Schirmann). Heimatland (Kistermacher-Bussmann). Leb wohl, schwarzbraunes Mägdelein (Erwin-Beda). Overture, "Orpheus in the Underworld" (Offenbach). Selections (Johann Strauss): (*a*) Schatzwalzer, (*b*) Waltz Seid umschlungen Millionen. Saxophone Solos: (*a*) Blinde Augen (Derbij), (*b*) Einmal am Rhein (Ostermann). Selection from "The Merry Widow" (Lehár). Zwischen Lübecker Tor und der Kirchenallee (Grothy-Hermann). In Hamburg, da wartet ein Mädel auf dich (Brennecke). Onestep, The Student passes by (Ibanez-Chiappo).
12.30 *p.m.* (in the interval)—Time and News. 2.15—Programme for Children.
3.20—*Choral Concert*, relayed from *Mannheim*. Song (Smetana). Freiheitsmai (de Nobel). Ständchen (Schubert). Wiegenliedchen (Gaber). Feierliche Nacht (Lenz). Dort liegt die Heimat mir am Rhein (Attenhofer). Die Primel (Mendelssohn). Das Echo (Schubert). Canon (Lachner). Dat Quisselche (Othegraven). Der Besenbinder (Othefraven). Sonntagslied (Mendelssohn). Frisch auf, mein Volk (Lenz).
4.5—*Orchestral Concert*, conducted by Gustav Görlich. Soloist: Erica Stein (Soprano). March of the Tin Soldiers (Nedbal). Little Ballet Suite (Armandola). Potpourri, Rendez-vous bei Franz Lehar (Hruby). Soprano Solos: (*a*) Meine schöne blaue Donau (Dostal), (*b*) In Wien wo der Wein und der Walzer erblüht (Stolz), (*c*) In deinen Augen liegt das Herz von Wien (Stolz). Waltz, des Goldschmieds Tochterlein (Fetras). Intermezzo, Frühlingsahnung (Lange). Soprano Solos: (*a*) Wenn der Frühling erwacht (May), (*b*) Unter vier Augen (Stolz). Waltz from "Der liebe Augustin" (Fall). Theatre March (Fall).
5.30—Time and Sports Notes. 5.40—Talk on Flowers. 6.5—Talk from *Frankfurt*. 6.30—Time and Weather.
6.35—See *Frankfurt*.
7.5—Concert by the Palatinate Orchestra, relayed from *Mannheim*. Soloists: Margarete Klose, Lilly Klaus and Marcel Wittrisch. 9.15—News Bulletin. 9.35—Dance Music. 11.0 (approx.)—Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.
7.15—11.30 *a.m.*—See *Turin*.
11.30—*Gramophone Records*. Overture, "Le baruffe chiozzotte" (Sinigaglia). Temptation (Franco). El trianero (Freire).
11.45—See *Turin*.
12 *noon*—*Quintet Concert*. Ouly (Land). Moonlight on the Alster (Fetras). Little Geisha (Scassola). Selection from "Il Natale di Pierrot" (Monti). I tuoi baci (Rippo). Selection (Dostal). The Train (Duty).
1.0—3.50—See *Turin*.
3.50—*Variety Concert*. Soloist: Natalia Jaschi (Soprano). Festival Overture (Lortzing). Soprano Solos (Pavani): (*a*) Ricordi brasiliani, (*b*) L'andalusa. Selection from "The Count of Luxembourg" (Lehár). Soprano Solos: (*a*) Vergine folle (Pavani), (*b*) Giava (Vera). Jouane (Berti). Del Albaicin (Lucchesi). Fifi (Ravasini).
4.0—6.5—See *Turin*.
6.5—*Quintet Concert*. In the Field (Winter). Diana (Buzzacchi). The Dancer of Baghdad (Cortopassi). Marcetta dei pupi (De Micheli). Selection from "Iris" (Mascagni). Verschmähte Liebe (Lincke). Selection from "L'amante nuova" (Ostali).
6.25—French Lesson on Gramophone Records. 7.0 till Close Down—See *Milan*.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by *Milan*, 905 kc/s (331.5 m.); and *Genoa*, 959 kc/s (312.8 m.).
7.15 *a.m.*—Giornale Radio. 7.30—Market Prices.
10.15—*Concert*. Overture to a Revue (Lincke). In a Clock Store (Orth). Piccola (Amadei). Corteggio rustico (Scassola). Potpourri, Fortissimo (Kálmán). Pavane from "Le Maschere" (Mascagni). Sombra (Rampoldi). Selection from "Eva" (Lehar). Indian March (Siede). Intermezzo from "I quattro rusteghi" (Wolf-Ferrari). Biondina bella (Stocchetti).
11.30—Gramophone Records of Light Music. 11.45—Giornale Radio. 12 *noon*—Time and Announcements.
12.1 *p.m.*—*Concert*. Overture, "Les Deux Savoyards" (Offenbach). Selection (Strauss). Ballet Music from "Faust" (Gounod). Selection from "Aïda" (Verdi). Gavotte (Hellmesberger). Selections from "Paganini" (Lehar). Gipsy Song for Strings (Boldi). Russian Dance (Leopold). In the interval, Exchange Quotations.
1.30—3.15—No Transmission. 3.15 Giornale Radio. 3.30—Programme for Children. 3.40—Talk for Women. 3.50—Gramophone Records of Popular Music. 4.0—Dance Music from the Sala Gay. 4.30—Talk: The Theatre and its Characters. 4.50—Giornale Radio, Lottery Results and Announcements. 5.45—Agricultural Report. 6.0—Announcements.
6.5—*Concert*. Festival Overture (Leutner). Ronda blu (Manno). Potpourri (Erbert). Selection (Goethe). 6.30—Time and Announcements, followed by Gramophone Records of Light Music. 7.0—Giornale Radio, Weather and Gramophone Records of Light Music.
7.20—*Concert*. Overture, Das Veilchenmädel" (Hellmesberger). Potpourri, Für alle (Dostal). Indian March (Cabella).
7.45—Talk: Events and Problems.
8.0—Symphony Concert. In the interval, Reading of Italian Prose, with Commentary. 10.0—Giornale Radio and Dance Music from the Fiascheteria Toscana. 10.55—News Bulletin.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by *Graz*, 852 kc/s (352.1 m.): *Innsbruck*, 1,058 kc/s (283 m.); *Klagenfurt*, 662 kc/s (453.2 m.); *Linz*, 1,220 kc/s (246 m.), and *Salzburg*, 1,373 kc/s (218 m.).
8.20 *a.m.*—Market Report. 8.30—Weather Forecast. 9.50—Tidal Report. 10.30—Concert of Light and Operetta Music by the Karl Machek Orchestra. 12 *noon*—Time, Weather, News and Programme Announcements. 12.10 *p.m.*—Concert (contd.).
12.45—*Recital by Giovanni Martinelli on Gramophone Records*. Two Arias from "La Juive" (Halévy). Aria from "André Chenier" (Giordano). 2.0—Time, Weather and News. 2.25—Programme for Children. 3.40—"*The Treasures in the Silver Lake*"—A Play of the Wild West (May), arranged for Radio by Günther Bibo.
4.0—Unveiling of the Haydn Memorial of the Vienna Male Voice Choral Society, relayed from Haydn's House.
4.30—*Concert by the Josef Holzer Orchestra*, March, Auf der Seiler stätte (Neumann). Overture, "Lysistrata" (Lincke). Waltz, An mein Wien (Ertl). Duets by Grabner and Klein: (*a*) Was ist die Schönste in Wien? (Friedrich) (*b*) Die Kraxler (Grabner). Stürmisches Lieberwerben (Leuschner). Intermezzo, Japanische Nachte (Engl). Song: Was ich längst erträumte (Lehár). Duets: (*a*) Wenn ma könnt' wia ma möcht (Sioly) (*b*) Mei liebes Putzerl (Hlinak), (*c*) Eine Rundfahrt mit Onkel Fritze (Friedrich). Potpourri, In the Seventh Heaven (Fetras).
5.56—Topical Talk. 6.20—Time Signal, Weather, News and Programme Announcements
6.35—Haydn Memorial Concert by the Vienna Philharmonic Orchestra, conducted by Clemens Krauss, relayed from the Music Society's Hall. Soloist: Pablo Casals. Symphony, No. 103, in E Flat Major—the Surprise Symphony (Haydn). Concerto for 'Cello and Orchestra in D Major (Haydn). Entr'acte Music from "The Seven Words on the Cross." (Haydn). Symphony No. 2 in D Major, Op. 36 (Beethoven).
8.30—News and Weather Report. 8.45—Programme of Dance Music by the David Mathé Jazz Band, with Robert Edlinger (Vocalist).

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.
10.20 *a.m.*—Aviation Weather Report. 10.25—Interval. 10.45—Press Review. 10.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, *Cracow*. 11.5—Programme Announcements. 11.10—Educational Programme relayed from *Lwów*. 11.45—Light Music on Gramophone Records.
12.10 *p.m.*—Weather Report. 12.15—Economic Report. 12.25—Interval. 12.35—Light Music on Gramophone Records. 12.55—Interval. 1.45—Light Music on Gramophone Records. 2.15—Military News. 2.25—Review of Periodicals. 2.45—Exchange Quotations and Hydrographic Report. 2.50—Light Music on Gramophone Records. 3.20—Talk.
3.40—Variety Music on Gramophone Records. 4.0—Divine Service from the Ostro Brama, *Wilno*. 5.0—Interval. 5.5—Programme for Children. 5.30—Concert for Young People. 5.50—Miscellaneous Items. 6.15—Agricultural Correspondence. 6.25—Programme Announcements. 6.30—Interval. 6.35 See Vienna. 8.35—Radio Journal. 8.50—Sports Notes. 8.55—"On the Horizon."
9.10—Pianoforte Recital of Chopin's Works by the Winner of the First Prize at the Second International Chopin Competition. 9.40—Radio Journal. 9.45—Weather and Police Notes. 9.50—Dance Music.

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185

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